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LECTURES ON AMPUTATION,

AND ON THE

Nature, Progress, and Terminations of the Injuries for which it is required.

(Delivered at Sydenham Coll. Med. School.)

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LECTURE XI.

Mortality of primary amputations. Influence of favourable or unfavourable external circumstances upon the results. Comparative mortality of primary, intermediary, and secondary amputations, under different circumstances. Average mortality in 664 primary and 654 secondary amputations for gunshot wounds. Comparison between the results of amputations in military and in civil hospitals, for their different classes of injuries. Result of amputations for chronic disease. Deductions from this view, and conclusions founded upon the series of facts herein stated.

Diseased Actions supervening on Primary Amputation under Favourable, Partially Unfavourable, and Unfavourable External and Collateral Circumstances.

In the two last lectures I gave the results, and the leading facts connected with them, of the most fatal set of amputations I have had an opportunity of studying. To follow out the subject in a more general sense, as regards the results of primary amputation, and the modifications induced by the varying nature of external circumstances, I must beg attention to the three tables now laid before you—or rather two—for I have added the cases treated under *partially* unfavourable circumstances to those more unfavourably situated.

The distinction made in these tables between those cases amputated on the field and in hospital will be adverted to hereafter; for the present, it is necessary to consider them as one class. There is a total of 57 primary amputations for consideration; in three-fifths of which the operations were performed, and the cases treated, under circumstances more or less unfavourable. 17 of the latter class were of the March series, performed under no very unfavourable physical circumstances, but under depressing and highly-deleterious dynamic influences; to which, almost exclusively, those fatal effects, as I endeavoured to show you, might be attributed—as 15 of that number died, if we would now ascertain how far physical circumstances influence the result where there is no predominating moral or dynamic cause prevailing—we must separate the 17 from the 36 treated under more or less unfavourable circumstances, and consider the mortality and diseased actions supervening on the remaining 19: of which number 10 died—1 in 1.9; about 52 per cent.

10 *deaths occurred in* 19 *cases of primary amputation, performed under more or less unfavourable external circumstances.*

2 Died of cholera prevailing at the period.
1 Arm, with wound of hip.
1 Partial amputation of hand.
1 Tetanus (case of thigh torn off by cannon-shot).
3 Irritative fever (2 of thigh, 1 of arm).
1 Hectic, with severe wound of thigh above point of amputation.
1 Bilio-remittent fever, diseased stump (arm).
2 Febrile type not ascertained (shoulder and arm).

—
10

These are the causes, chiefly as shown by the symptoms, for the records of the post-mortem examinations in many are either wanting or imperfect.

Many of these amputations, performed by myself, and other gentlemen of the medical staff, at the hospitals under my direction in Oporto, were treated under circumstances peculiarly harassing to the medical officer. The hospital crowded; cholera and a malignant fever, remittent and typhoid in character, generally prevailing.

The circumstances then were highly unpropitious, and the mortality is certainly great in proportion. Somewhat more than half—we may take as the average loss when

the physical and external circumstances are very unfavourable—but even when these are only moderately or temporarily unfavourable, if there be superadded dynamic and moral deleterious influences, then nearly the whole perish—15 out of 17, as we have already seen, or seven-eighths of the whole, die. If we glance at the review already given of all the circumstances attending the 500 wounded of the March series, it will be evident that no other adequate causes of a physical character existed to produce such a mortality.

In corroboration of this, let us turn to the 6 cases treated under partially unfavourable circumstances: the cases amputated of the 16th of March series were scarcely more unfavourably situated as regarded any physical circumstances, and yet the former gives only a mortality of one-sixth instead of seven-eighths. It may be observed, that 3 of the 6 were cannon-shot injuries—1 of the amputations of the thigh and 2 of the shoulder-joint.

Two of these cases were not only temporarily accommodated in a field hospital, hastily and very imperfectly organised, but in the second week transported from Irun to San Sebastian. But these 6 were all wounded after signal victories, and without much previous exposure to bad weather and distressing duty.

If we consider the character of the diseased actions causing the mortality, and compare those supervening on the March series of 15 with those carrying off 10, when physical unfavourable circumstances alone prevailed, or at least largely predominated, we are struck by *the difference in the proportion of the bilio-remittent fever:* in March, two-thirds of the whole died from it: in the 10 deaths, on the contrary, only 1, or one-tenth: here, too, there is no note of metastatic abscesses—purulent depôts or diseases of the viscera, affections largely predominating in the March cases—in all with 2 exceptions: tetanus removed 1 of the 10, and did not supervene in any of the 15 fatal cases. Cholera prevailing in the town, also carried off 2 of the 10.

Thus the difference observable in the nature of the supervening actions causing death, is not less remarkable than the difference in mortality; both circumstances pointing clearly to some predominating influence in the one not existing in the other—that influence was one of vital character—moral and dynamic—totally independent of the mode of operation—system of treatment, or any physical and more material circumstances to which attention is usually and chiefly directed, and hitherto almost exclusively considered, as accounting for any differences in the progress and results of amputations. The conclusion is inevitable, thus founded upon a large number of facts and observations, and most important; viz., *That there are two classes of causes materially influencing the development and character of diseased actions supervening in primary amputations,* and consequently the mortality of such operations: the one moral and dynamic by far the most fatal and difficult to combat, subtile in its characters, not easy to trace even in the progress of its actions, and for which medicine or surgical art can provide no remedy, rarely succeeding even in temporarily arresting its progress, or modifying its results. The second are physical, more obvious in character, depending upon many appreciable circumstances—the mode of operation, the time, the medical treatment, the diet, air and other circumstances—which scarcely need enumeration; for it is precisely to these, as obvious influences, that attention is usually and exclusively paid in forming a prognosis, and deciding upon the therapeutic and surgical measures to be adopted: whereas these should bear a direct relation to both classes of influences, and moral and dynamic powers be brought to bear upon each case, combating, by contrary characters and tendencies, all that is deleterious. For reasons connected with this class of causes, amputations, under such influences, must ever be more fatal in hospitals than in private life, where every act of kindness and whisper of hope—every tie of affection binding man to his kindred and to life itself for their sake, when often not for his own, are most valuable aids to recovery, and directly tend to diminish the mortality after operation.

We have now to consider the influence of favourable circumstances, or rather the nature and progress of the supervening actions under such conditions—what is the relative mortality and its causes.

In 21 amputations contained in the annexed table, performed either on the field or in hospital within twenty-four hours, 4 died; 1 in 5: 3 were of the thigh, and 1 of the arm. The causes of death were as follows:—

3 of the thigh out of 9 primarily amputated; 1 in 3.

1 Fractured femur; irritative fever; no organic or recent disease, *although bone denuded near extremity; the stump was healthily united, in nearly its whole extent.*

1 Tibia into knee-joint; febrile action only occasionally, very moderate, and of no definite type; extensive necrosis involving whole of femur; appetite good, and slept at night, twenty-four hours before his death; hepatisation; adhesions and vomicæ of lungs; liver greatly enlarged; mesenteric glands diseased.

1 Tibia; *bilio-remittent fever;* phlebitis; pus in saphena vein, as far as its junction with the femoral, and in that vein also; liver pale, other viscera healthy; abscess along the course of artery and vein.

1 Arm; hand crushed and comminuted by grape-shot; great local inflammation;

tenderness and swelling up to shoulder; sloughy stump; coats of artery and vein thickened; clot in vein to axilla; no particular morbid appearances elsewhere; but a large collection of pus (and no other evidence of disease) in left knee-joint.

Let me remark here, that while we saw affections of the viscera, purulent depôts, &c. largely predominating in the March series, they did not appear at all in the second set of cases. Here, again, we have them thus:—

In 15 cases of primary amputation, under predominating, deleterious, dynamic, and moral influences, and temporarily unfavourable external or physical circumstances, purulent depôts, and affections of viscera, took place in.....	13
In 10 cases treated under unfavourable, physical, collateral circumstances	0
In 4 cases under favourable, physical, and collateral circumstances	3
29	16

From this statement it may be fairly concluded, that the mere physical and external conditions under which primary amputation is performed, and subsequently treated, *exercise little or no direct influence upon the development of this peculiar class of complications, supervening after amputation*; and, moreover, that they are probably dependent upon a dynamic order of causes, acting chiefly through the nervous system, some change possibly taking place in the character, quantity, and force of the *vis nervosa*, directed to particular organs or parts of the body. This, of course, I give only as a conjecture, which may seem, in some degree, justified by the facts—the latter being distinct—important, and offering valuable matter for consideration.

The mortality in the 21 cases, 1 in 5.2, seems more considerable than it has generally been stated to be in similar cases under similar circumstances; but, first, we have to observe, that 13 of these amputations were either of the thigh, or at the shoulder-joint; and that although in 9 of the thigh 3 died, or one-third, that in the remaining 12, in which are included 4 at the shoulder-joint and 4 cannon-shot injuries, only 1 died—a rate of mortality exceedingly low.

The result, such as it is, certainly is not equal to some averages that have been put forth, while it is greater than others; those performed after the battle of Thoulouse, for instance. I can only give and vouch for the accuracy of the facts which have fallen under my own observation; at the same time that I can also vouch for all these amputations, with one exception, having been performed *secundum artem*, and the majority on young and healthy men, without unnecessary delay, and with a moderate loss of venous blood, and scarcely any arterial, during operation. That in addition, there was the most anxious care devoted to the after-treatment, for which there were all necessary means and appliances; and the patients were placed in an airy, large, and well-organised hospital. Thus, it is difficult to conceive amputations, under any circumstances, on service, more favourably situated for recovery.

I have never seen greater success. On my return to the Peninsula, in 1835, the first 8 amputations I performed, both secondary and primary, all recovered; and 2 of the former, were cases of fractured femur, and the patients in an almost hopeless state. After this several of my amputations died in succession, although apparently more favourable cases for recovery than some of the more successful series; and thus, whether in my own operations, or those of others under my observation, I have ever seen the results to be. The average recoveries in any series of cases above 20 in number, has not been greater than 5 out of 6, or 6 out of 7, when there has been a fair proportion of lower extremities. In the series under consideration, although only 1 died in 12 (exclusive of amputation of the thigh), yet when these are added, the success is reduced below the average I have stated, and the mortality is 1 in 5.2.

Having now very conscientiously given the results of my own experience on this subject, it may be interesting and instructive to compare it with the results of the next most recent experience in amputations for gunshot wounds—such as the results in the action of Navarino—the "glorious days" of July—when the patients were placed indubitably under most favourable circumstances, with all that the skill of the best French surgeons could accomplish for their cure; and any other series that may be attainable. Lastly, a comparison must be instituted between the result of amputations for the injuries of civil life, performed and treated in civil hospitals; all of which cases must also be considered as under the most favourable circumstances. If we commence with the more remote series of amputations first, we find from the records of the American, Egyptian, and Peninsular wars, occurring at the close of the last and beginning of the present century, extending through a period of some five-and-twenty years, that the following were the chief results bequeathed by the respective medical staffs for the guidance of the profession:—

Mr. Guthrie gives a return of the amputations (exclusive of the shoulder-joint), performed during the period of six months, occupied by the transit of the British army from Portugal to Bayonne, and collected by Sir James M'Gregor.

Operations on the field, 291; died 24. 160 remained "under cure;" but these are considered (perhaps not without liability to error) to be recovered. There is a mortality,

then, of only 1 in 12; the mortality in the lower extremities, it is true, is more—1 in 6¼; 19 in 128; 66 remaining under cure.

In subsequent amputations, equally exclusive of shoulder-joint cases, in 551 cases there were 265 deaths, with 116 still under cure; giving a mortality of very nearly one-half, independent of any deaths that might occur during the remainder of the treatment.

As regards the *secondary* amputations, this is nearly the result (a little less favourable) which I have recorded from the hospitals under my direction in the same country. In my returns, however, I included shoulder-joint cases. Thus, in 51 amputations performed after the first 48 hours, 26 died.

If, however, I were to select those which, as I shall point out hereafter, ought alone to be termed *secondary* amputations (implying, as the term is held to do, a period of selection), then in 25 cases the mortality was 9; a fraction beyond a third, 2.7.

M. Percy reports that, after the action of Newbourg, he performed 92 primary amputations, and 86 were cured; the mortality not amounting to 1 in 15: the proportion of upper extremities not stated.

Of 60 wounded, who underwent primary amputation after the naval action of Jan. 1, 1794, only 8 died; 1 in 7.5.

After the battle of Thoulouse, Mr. Guthrie again reports, and to the accuracy of this series I would attach more faith, since Mr. G. could not have the power of vouching for the perfect accuracy of the larger series already quoted, that of 48 primary amputations, 10 died; which brings the mortality down to 1 in 4.8. Only 7 of the 48 were of the arm, the rest thigh and leg: how many of the former is not stated.

The secondary operations give for result 21 deaths in 52; 1 in 1.5; between one-half and one-third: the superior extremity giving a mortality of one-fifth, and the thigh of one-half.

At the attack of New Orleans, in 45 primary amputations, 7 died; 1 in 6.4: in 7 secondary, 5 died; 1 in 1.4.

M. del Signore, a surgeon of the Egyptian army, tells us, that of the wounded resulting from the battle of Navarino, in 31 primary amputations he lost only 1; and in 38 amputated during the twelve following days (all therefore *intermediary*) he lost 13, or one-third only.

In the revolution of 1831, it is reported by M. Velpeau, that about ("*environ*") 100 amputations were performed at 10 civil hospitals in Paris; that the primary were nearly all successful; the secondary fatal in the majority: a statement which, if valued by the definite and precise data furnished, will be found to be worth nothing, unless conclusions be drawn from it, and it might then become worse than useless, and prove mischievous.

Dr. Burke, in an official report, states, that in 80 primary amputations performed at Bhurtpore, in Upper India, all recovered!

Several Collected Returns of the Results of Amputations in Egypt, America, France, and the Peninsula, in the Wars which took place in Different Armies and Ships from 1780 to 1840.

From what Battles resulting, and by whom Reported.	Primary.	Died.	Average Mortality.	Secondary.	Died	Average Mortality.	
Baron Percy, at Newbourg.....	92	6	15.3				
Baron Larrey	14	2	7.				
New Orleans	45	7	6.4	7	5	1.2	
Naval Action of June 1, 1794	60	8	7.5				
After the Battle of Aboukir.....	11	0	..	3	3	1.	
Battle of Camperdown; Dr. Wright, flag-ship Venerable :—							
Upper Extremity	7	..					
Lower do., 3 double amputations	8	..					
Various Ships: — Bombardment of Algiers :—							
Upper Extremity	28	7	4.	2	2	1.	
2.5							
Lower ditto	29	15	1.9				
British Peninsular Army, in 6 months :							
Upper Extremity	163	5	32.6	296	116	2.5	2.0
12.1							
Lower ditto	128	19	6.7	255	149	1.7	
Thoulouse—Mr. Guthrie's Report :—							
Upper Extremity	7	1	7.	16	4	4.	2.4
4.8							
Lower ditto	41	9	4.5	37	18	2.0	
Navarino—M. de Signore.....	31	1	31.	38	13	2.8	
	664	80	8.3	654	310	2.1	

From the table of many complete series, we see how great may be the variation between one series and another. The average mortality on the whole primary amputations is 1 in 8.3; in secondary amputations, 1 in 2.1. If the upper extremities be taken singly, the disproportion is still greater, for then the mortality in primary amputations is only 1 in 15.7; whereas in secondary it is still nearly as great as before—1 in 2.5. The lower extremities, taken singly, approach more nearly to each other in mortality; in primary amputations, it is 1 in 4.7; in secondary, 1 in 1.7: thus the value of primary amputations is shown to be less as applied to the lower than to the upper extremity. The lowest average loss in any one of these distinct series of primary operations is 1 in 31, or about 3 per cent., that of M. del Signore's; the next, Baron Percy's series, 1 in 15, between 6 and 7 per cent.; the next, the Peninsular army, 1 in 12, between 8 and 9 per cent; several series at 1 in 6 or 7, about 16 per cent; while the greatest mortality is in the series from the bombardment of Algiers, where it is to be presumed the great majority were cannon-shot injuries, the mortality is 1 in 2.5, or 38 per cent. The greatest mortality after this is in the series of Thoulouse, 1 in 4.8, or 20.8 per cent. The mortality in secondary amputations varies from 34 per cent., that being the lowest average: thus the lowest average mortality of secondary amputations just reaches the highest from primary, in these series. If from gunshot injuries we proceed to the injuries of civil life, and, finally, to the diseases for which amputation is performed, we shall find amputation no longer presents the same results. The materials for comparison, unfortunately, are not equally abundant, and civil surgeons would seem to take less interest in the question connected with such operations. Drs. Norris and Hayward, of the Pennsylvania and Massachusets Hospitals, have led the way to a careful registry of operations, and I sincerely trust that it may become more general in our large institutions; and in the "Medical Gazette" of Dec. 4, 1840, Dr. Laurie, of Glasgow, has made excellent use of the materials at his disposal; although these, unfortunately, are not in the perfect and complete form necessary to ensure accuracy in the results.

M. Gendrin, in 1835, in his thesis, gave the result of 60 amputations in Paris.

	Died.	Mortality.
24 For chronic disease	9	1 in 2.6
11 Secondary amputations for injuries of civil life	7	1 in 1.5
8 Primary amputations for ditto	7	1 in 1.1
43	23	1 in 1.8

20 Amputations performed in hospital in 1834, on children for chronic affections —all recovered.

In the Annales of Heidelberg, 1834, tome i., partie i., there is a statistical detail of the Clinique de Chelius, comprehending all the operations performed in the space of four years, from 1830 to 1834.

In 29 amputations of superior or inferior extremities, 2 only died, 1 in 14.5.

In the Parisian hospitals generally, the estimated mortality on their amputations, as it has been stated by various persons who devoted some attention to the subject, is from one-half to one-third.

Dupuytren, in his "Leçons Orales," vol. iv., gives 29 cases, and a mortality of 1 in 3.

Roux gives the same result without stating numbers.

Hypolite Larrey—"*Sanson de la Reunion des Plaies*"—gives 57; mortality 1 in 6.

"Dubois Memoires et Observations sur la Reunion," gives 28; mortality 1 in 9.

But I turn to the most interesting, and, at the same time, the most complete series of facts furnished during the last few years, namely, those published by Drs. Norris and Hayward, of Boston and Philadelphia. These tables include *the whole of the amputations* performed in each hospital during a series of years, the cases obviously placed under the most favourable circumstances.

In the table of injuries, it will be seen I have contrasted the results of several series of the amputations, at certain different periods, performed in the military hospitals under my direction in Portugal and Spain, where 55 died in 109.* But as the only fair comparison between the mortality of amputations after gunshot wounds and after the injuries of civil life, is to place both under similar external and collateral circumstances; and the latter being placed under the most favourable circumstances for efficient and successful treatment, I have subjoined a second series of numbers, showing the relative mortality in cases treated under favourable conditions in a military hospital. The total result then stands thus:—In 54 cases (exclusive of partial amputations of hands and feet) 15 died, giving a mortality of 1 in 3.6. The result thus appears nearly the same in the civil and military hospitals, the latter having the advantage by a fraction. According to this table, it may be observed that the mortality in amputations after injuries is nearly double that which took place after operation for chronic disease. Dr. Laurie gives as the comparative mortality of primary amputations and those for disease in the infirmary at Glasgow, in primary, 1 to 1; for disease, 1 to 2.75.

*. See Table V., p. 435.

AMPUTATIONS FOR INJURIES IN CIVIL HOSPITALS.

Primary.

	Deaths.	Relative Mortality.	
12 of thigh.....	7.....	1 in 1.7	Lower extremity,
14 of leg.....	1.....	1 in 14.	1 in 3.2
7 arm and shoulder..	3.....	1 in 2.3	Upper extremity,
10 forearm.....	0.....	0 ..	1 in 5.6
43	11	1 in 3.9	

Intermediary.

Dr. Hayward's return alone enabling these to be distinguished.

4 thigh.....	3.....	1.3
7 leg.....	4.....	1.7
Upper extremity....	0.....	0
11	7	1 in 1.5

Secondary.

6 thigh.....	0.....	0
8 leg.....	4.....	1 in 2.
5 arm.....	0.....	0
6 forearm.....	1.....	1 in 6.
25	5	1 in 5.

AMPUTATIONS FOR DISEASES.

28 thigh.....	5.....	5.6
20 leg.....	3.....	6.6
10 upper extremity...	0.....	0
58	8	1 in 7.2

137 total of amputations in the two civil hospitals; died, 31.—Mortality, 1 in 4.4.

	Primary.				Secondary.			
	No.	Died.	Mortality.		No.	Died.	Mortality.	
Mr. Guthrie's series, at Thoulouse:—								
Upper Extremity	7	1	·7.	9.5	16	4	1 in 4.	4.6
Mr. Alcock's series in Spain and Portugal ditto	12	1	12.		12	2	6.	
Mr. Guthrie's at Thoulouse:—								
Lower Extremity	41	9	4.5	4.7	37	18	2.	2.
Mr. Alcock's ditto.....	21	4	5.2		21	10	2.1	
	81	15	5.4		86	34	2.5	
Messrs. Hayward and Norris's Amputations for Injuries received into Civil Hospitals:—								
Upper Extremity	17	3	5.6		11	1	11.	
Lower ditto	26	8	3.2		25	11	2.2	
	43	11	3.9		36	12	3.	
Messrs. Hayward and Norris's Amputations for Chronic Disease:								
Upper Extremity	10	..	..					
Lower ditto	48	8	6.					
	58	8	7.2					

But the result in the hospitals under my charge is much below the average success, as relates to primary amputations (though greater in the secondary), than that of the table of collected returns of several actions already shown to you. If we take the whole number of primary and secondary as representing a fair average, even of cases treated under the most favourable circumstances, then compared with amputations for injuries in civil life in which the mortality is 1 in 3.4, with those in war, in which it is 3.3, there is only a minute fractional difference. This, however, may not be quite just; for although looking to the different series, and observing in nearly all the highly-favourable results of their primary amputations, I doubt not the majority have been treated under advantageous circumstances, yet some may not have been so situated; and, moreover, the proportionate numbers of secondary and primary amputations should be alike. The statistical results of amputations also depend so much, first, upon the relative proportion of secondary, intermediary, and primary amputations; and, secondly, of upper and lower extremity; that where all are classed under one head *a great source of fallacy may exist.*

If we may assume these two civil hospitals, however, to give a fair average for the operations and injuries of civil life, and Mr. Guthrie's at Thoulouse, or my own series, as an equally fair ratio in military life where cases are not under peculiarly disadvantageous circumstances, we have all the means of comparison at hand.

I do not feel authorised in giving Dr. Laurie's series as a fair standard, for the reason, that he expressly states some of the journals of cases from which the whole have been selected are altogether wanting. I have already explained how fatal to the accuracy of any average must be the omission of a single case; how much more an indefinite and unknown number! The incompleteness of the materials is the more to be regretted from the accurate spirit of analysis which distinguishes Dr. Laurie's paper, and the abundance of valuable detail accompanying his facts. Had his materials been equal in value to the ability and philosophic mode of handling them, Dr. Laurie's paper would unquestionably have been the most valuable yet published on the subject of amputations—their results and effects.

I would premise, before drawing inferences from the facts stated, that as I have taken neither extreme in the "collection of returns," but selected the series at Thoulouse, which, under all the circumstances, gives the best guarantee of accuracy, together with sufficient information connected with them; and, finally, my own, when no very unfavourable circumstances were existing, in which a medium result is also shown, though somewhat more favourable than that of the series at Thoulouse; we have the means fairly chosen for arriving at a very close approximation to the truth in relation to the *comparative results of amputation in civil and military hospital practice.*

To what conclusions do the facts brought forward in the last analytical and numerical statement naturally and legitimately lead? I believe they will be found to be not less novel than important.

Civil Hospitals.

1. Amputations for chronic disease are more successful than primary for injuries, by as large a proportion as 1 death in 7.2 compared with 1 in 3.9.

2. In a still greater degree are they more successful than the secondary amputations (including intermediary) for injuries, the relative mortality being as 1 in 7.2 to 1 in 3.

Thus in civil hospitals the success resulting from amputations is stated in the following order:—1. Amputations for chronic disease. 2. Primary amputations for injury. 3. Secondary amputations.

Comparing these with the results of amputation in military hospitals, when no peculiarly disadvantageous conditions interfere with the progress of the cases, although inevitably some must exist not experienced in civil life, we find, as a total result, that primary amputations are not so fatal in military hospitals, the difference being as 1 in 5.4 compared with 1 in 3.9; and although both upper and lower extremities amputated for gunshot injuries present a favourable difference, yet is this most signal in the upper extremity, 1 in 9.5, and 1 in 5.6, being the relative proportion of mortality in military and civil hospitals; while in the lower extremity, 1 in 4.7, and 1 in 3.2, express the difference. Yet when amputations are performed for chronic disease, the balance is turned in favour of the civil hospitals, these only lose in total result 1 in 7.2, or 1 in 6. in the lower extremity, and no death in 10 of the upper; whereas the mortality in the military hospitals for gunshot injuries, as above stated, is 1 in 5.4; a superiority which seems, so far as the number allow us to judge, about equal in both upper and lower extremities. Secondary amputations in military hospitals are less successful than in civil, the difference being as 1 in 2.5 to 1 in 3: of course they fall far below the successful results of amputations for chronic disease, which give a mortality of only 1 in 7.2.

It is remarkable that in military hospitals in each of the series taken as affording a fair standard, the amputations of the lower extremity are one-half more fatal than the upper, whether primary or secondary, in relation merely to the extremity operated upon; while, again, in both upper and lower the secondary are about one-half more fatal than the primary. This law or average seems no longer to hold, however, if we pass on to the amputations for injuries in civil life. The

disproportion between the success of the upper and lower extremity is by no means so great in primary amputations, being only as 5.6 to 3.2; and in secondary amputations it is much greater, being as 11 to 2.2. Again, there is not the same relative proportion between the primary and secondary amputations taken as a whole, instead of a difference of 5.4 to 2.5 in civil hospitals, it is reduced to 1 in 3.9, and 1 in 3.

It is difficult to resist such evidence, so distinctly proving that while secondary amputations are more favourable in civil than military hospitals, the primary are much less so. Into the causes of this difference I must not enter here, but defer it for another lecture. Dr. Laurie's statistics, so far as we may venture to take the result strongly, confirm a similar view.

By all that has been published on the subject, I am led to believe that the amputations of all classes in the Parisian hospitals have a much higher average mortality. In the 43, however, given by M. Gendrin, it is worthy of remark, that great as is the mortality, it is least in the amputations for chronic disease, the *primary* being the most fatal.

We have seen that primary amputations in military hospitals, where they seem indubitably most successful, under unfavourable circumstances, will give a mortality of one-half; and if to these more general and physical conditions a moral or dynamic influence of a deleterious character be superadded, 88 per cent. may perish; while a general average success in civil hospitals is very low. *Primary amputation, therefore, is an operation under which the system becomes highly susceptible of supervening actions fatal to life.*

The proportionate mortality in fractures, under similar circumstances, undergoing treatment, and not amputated, treated in the hospitals under my charge during one year, was 13 in 43, or 1 in 3.3; of secondary amputations, 13 in 15, or 1 in 1.1. In fractures not amputated under such circumstances the mortality is least; but it must be remembered that this number represents only the most favourable cases, the whole of the amputations having been performed on those who probably, without an exception, would have died if left to take their course.

Dr. Laurie states, on the result of 40 compound fractures of civil life, where no amputation was performed, that 17 died, a mortality of 1 in 1.3, less than half; and he shows that when the attempt to save fails, secondary are less fatal than primary amputations; thus again reversing the results of military hospitals.

The small number saved under unfavourable circumstances, especially with the addition of depressing and deleterious dynamic influences, after both primary and secondary amputations, does not, it seems to me, lead legitimately to the conclusion, as Dr. Laurie would infer, *that more would be saved* if no amputation were performed; but it shows forcibly how little we have reasonably to hope under such adverse circumstances, *when the shock of an operation has to be superadded to the worst kinds of injuries.*

I hold this statement to be the more important, that surgeons, whether in public or private life, are less likely to be disposed to publish a series of cases with unfortunate results, however the circumstances of the cases may exonerate them from any blame or discredit.

I am much inclined to believe that a very erroneous idea is generally entertained in consequence, *as to the degree of success generally to be expected after amputation*, and especially after primary amputations. As the surgeons who have written since Bilguer, Le Conte, and Faure, have had it at heart to prove the dangers of *delay*, we have been favoured with very full information on the mortality of secondary amputations; nay, the *usual* loss has been by this means greatly exaggerated. But has there been the same zeal, in furnishing series of primary amputations for publication, to select those that gave results strongly contradicting the current of general opinion? Have we not rather been eagerly furnished with extraordinarily successful series? while, when a contrary result has taken place, it has been attributed to some peculiar influence or cause, by which such results could not be deemed to bear *justly* upon the question of success in primary amputations, and the series, therefore, not brought forward!

I am led to this conclusion, because, although the very question of the superiority of deferred amputation was only entertained because the *primary* were *so notoriously fatal*, yet since that period when Bilguer, Le Faure, and others wrote, we have seen nothing but series after series of the most astonishing success, and not one where the results contradicted the prevailing opinions!

And still further am I confirmed in this impression, by seeing a general feeling of doubt pervading men's minds as to the reality of a success, and of the relative rates of mortality between primary and secondary, so long held to be established.

The papers of Messrs. Hayward and Norris, in America; M. Gendrin and others in France; Dr. Laurie, of Glasgow; are but the indications of a general opinion, that practice continued through a succession of years, *does not bear out the very flourishing statistics* so long current, and so generally received, as to bear down all opposition, and for a time even to silence doubt, and its offspring inquiry.

Throughout the series of cases which have occurred under my own observation, when the circumstances have been highly unfavourable, the consequences have seemed to *fall more heavily on the primary than the secondary*, not only reducing the favourable balance

which may be generally observed, but actually giving the advantage to the secondary, while the intermediate amputations perish entirely. Thus, under unfavourable circumstances—

In 30 primary.... 21 died....1 in 1.2
In 13 intermediary 13 .....1 to 1.
In 4 secondary .. 3 .....1 to 1.2

The true secondary and the primary are thus equal in the mortality—the whole of the intermediary were lost. If we take the result of all amputations subsequent to the first twenty-four hours, then the primary obtains a trifling advantage, and not otherwise.

The proportion is very different under favourable conditions—

In 21 primary .... 4 died, or 1 in 5.2
In 29 secondary .. 6 ..... 1 in 3.3
In 13 intermediary 5 ..... 1 in 2.6

The important conclusion, therefore, to which I feel authorised in calling your attention, is, that in proportion as the circumstances are favourable, is the preponderance of success in primary over all subsequent amputations, but that as these become highly unfavourable that preponderance is less; and the secondary are even occasionally less fatal—the intermediary being the most so.

You are aware that since John Hunter's time it has been laboriously and perseveringly argued, that the body is in the best state for an amputation, the nearer the subject may be to a state of rude health. Admitting this were true, which is more than doubtful, the advocates of such doctrine jump to the conclusion that a man is nearer a state favourable to the endurance of the shock of an operation, immediately after the first shock of an injury, than at any other more distant period. For my part, I think it would be difficult to find a patient in a state more remote from health, or his system less capable of any vigorous healthy action, than immediately after the shock, moral and physical, supervening upon a gunshot wound crushing and splintering through the bone of a limb, disturbing the equilibrium of the circulation—altering the direction, the character, and quantity or energy of the nervous influence conveyed to all the more important organs, certainly more or less disturbing the functions of all.

If the statements to which I allude did not involve some grievous error, how is it that in two civil hospitals, with every opportunity of bringing the relative value of operations to a fair test, unbiassed by changing or unfavourable external conditions, so much larger a proportion of amputations should recover in amputations for chronic disease, than when performed immediately after the receipt of an injury? nay, that those performed for injuries at a period of selection, when inflammation and fever (the immediate products of the shock) have subsided, should still present a more favourable result? Yet by reference to No. V. it will be seen the relative proportionate mortality, as enumerated, stands thus (taking into account some intermediary amputations in one of the series, probably included under the head secondary amputations) for chronic disease, 1 in 7.2; secondary, 1 in 5.0; primary, 1 in 3.9.

It is true, that under ordinary circumstances on military service, primary amputations are more successful than secondary; but why? The diseased actions from gunshot injuries shatter the powers and irritate the system to such a degree, exposed, as the cases are, to many unfavourable conditions, as *fractures* (to which patients are not exposed in civil hospitals), many of which conditions or causes of death are escaped in their worst form by the *removal of the shattered limb*; then the diseased condition developed in particular organs, or throughout the system, is often such as to place a patient in a *still worse* condition, at any more remote period, for the shock of an operation, and subsequent reparative processes, than immediately after the first shock of the injury. Less of this takes place in civil life, and therefore the differences between the results of the two, as observed in military hospitals, is often not only materially diminished in civil life, but the balance turned on the other side. And the average success of amputations for chronic disease is more favourable than any amputation for injury, because the system suffers, and has only to struggle against the *consequences of one shock instead of two*. The approximation of two shocks near to each other is a great evil, and a source of imminent danger; and considering for the moment merely the result and effect of amputation, there is less of danger from it when the period intervening is increased; but in such intervening time we cannot guarantee the patient against the development of actions either fatal, or leading to a state still more unfavourable to any healthy reparative process than when the injury is first received.

It is impossible, with these facts before us, to deny that primary amputations prove, by their results, that the body is *not in* the best state for successful issue immediately after the first shock of an injury; and that those who have laboured under chronic disease, if the constitution has not entirely given way, are, upon the whole, better able to endure the shock of amputation—that at all events the shock of the operation, quickly added to that of the injury, is *more fatal to life* than the shock of an amputation upon a state of chronic disease. This granted, it is easy to understand how cases selected from those patients who survive beyond the inflammatory stage, without serious organic lesion, or continued destructive febrile action (*and many such cases there are*), do actually present a more favourable condition for the success of amputation, than those operated upon within the first twenty-four hours of the receipt of a violent injury.

No. XVI.—*Primary Amputations on the Field and in Hospital under Favourable Circumstances.*

Site and Cause of Injury.	On Field.			In Hospital.			General Result.			Mortality.
	Cured.	Died.	Total.	Cured.	Died.	Total.	Cured.	Died.	Total.	
Knee ....{ Cannon	1	..	1	..	..	..	1	..	1	9—3,1 in 3
Knee ....{ Musket	2	1	3	1	..	1	3	1	4	
Femur .....Musket	2	1	3	..	..	..	2	1	3	
Tibia and Fibula..Musket..	1	..	1	..	1	1	1	1	2	
Shoulder..{ Cannon	1	..	1	..	..	..	1	..	1	12.
Shoulder..{ Musket	3	..	3	..	..	..	3	..	3	
Elbow ....{ Cannon	1	..	1	..	..	..	1	..	1	
Elbow ....{ Musket	2	..	2	..	..	..	2	..	2	
Humerus..{ Cannon	1	..	1	..	..	..	1	..	1	
Humerus..{ Musket	2	..	2	..	..	..	2	..	2	
Radius and Ulna..Cannon..	..	1	1	..	..	..	..	1	1	
Total	16	3	19	1	1	2	17	4	21	5.2
Total unfavourable	3	12	15	3	12	15	6	24	30	1.2
Ditto partially unfavourable.	4	1	5	1	..	1	5	1	6	6.
General Total	23	16	39	5	13	18	28	29	57	1.9

No. XVII.—*Results of Primary Amputations—On the Field (within 8 Hours); in Hospital from 8 to 48 Hours.*—External Circumstances Unfavourable.

Site and Nature of Injury.	On Field.			In Hospital.			General Results of both.			
	Cured.	Died.	Total.	Cured.	Died.	Total.	Cured.	Died.	Total.	
Knee .....Musket..	..	1	1	1	2	3	1	3	4	1.1
Femur{ .....Cannon..	..	1	1	..	..	..	..	1	1	
Femur{ .....Musket..	..	2	2	..	..	..	..	2	2	
Ankle .....Cannon..	..	1	1	..	..	..	..	1	1	1.2
Tibia and Fibula.....Musket..	..	..	..	..	4	4	..	4	4	
Humerus .....Musket..	1	2	3	2	4	6	3	6	9	
Shoulder .....Musket..	1	..	1	..	1	1	1	1	2	
Elbow .....Musket..	..	4	4	..	..	..	..	4	4	
Wrist .....Cannon..	..	1	1	..	..	..	..	1	1	
Radius and Ulna.....Musket..	1	..	1	..	1	1	1	1	2	
Total.....	3	12	15	3	12	15	6	24	30	1.2
External Circumstances Partially Unfavourable.										
Femur .....Cannon..	..	1	1	..	..	..	..	1	1	
Ankle .....Cannon..	..	..	..	1	..	1	1	..	1	
Tibia and Fibula .....Musket..	1	..	1	..	..	..	1	..	1	
Shoulder{ ..... Cannon..	1	..	1	..	..	..	1	..	1	
Shoulder{ ..... Musket..	2	..	2	..	..	..	2	..	2	
.	4	1	5	1	..	1	5	1	6	6.
Total.....	7	13	20	4	12	16	11	25	36	1.4

All that can possibly be urged, if we would reason fairly upon the facts, is this, that, although the quick supervention of two shocks to the system produces a highly deleterious action, unfavourable to the success of any operation, yet when the consequences of the first shock of the injury are allowed time fully to develop their action, where a shattered limb also exists, to irritate and exhaust all the powers and external circumstances, as in military service, are more or less unfavourable, a still worse state is often the result, independent of the many deaths which follow before the first violence of such actions subsides. Therefore, by primary amputation, is there much saving of life; and in military hospitals a greater amount of success is obtained than after the febrile and inflammatory actions have subsided, although not usually so great as we observe in amputations performed for chronic disease, where the inflammatory disposition is less, and only one shock is experienced, that of the operation.

REMARKS ON APOPLECTIC AFFECTIONS.

By William Mac Intyre, M.D.

(Continued from p. 186.)

Of all the causes which immediately determine the apoplectic attack, in its sudden and strong form, the most common, undoubtedly, is *extravasation of blood*. This is generally associated with, and, often, dependent on the diseased conditions of the membranes, and the state of vascular turgescence already noticed. Meningeal hæmorrhage is sometimes found to take place from the superficial vessels, forming a layer of greater or less extent on the surface of the hemispheres; sometimes from the vessels of the choroid plexus, in which case the coagulum will be met with in the ventricles. It is not always possible to trace it to its precise origin; but in the more extensive extravasations, its source may be detected in rupture or ulceration of one of the principal arteries, veins, or sinuses.

More frequently, however, the hæmorrhage is the result of some previous disease, either of the vessels themselves, or of the proper substance of the brain. The morbid alteration of the structure of the vessels has been long known to be owing to a deposition of bony or earthy matter between the coats of the arteries, depriving them of their distensile property, and rendering them easily lacerable. To this condition of the vessels, usually the result of advanced years, and to consequent imperfect circulation, Dr. Abercrombie and others are disposed to attribute *ramollissement*, or *softening* of the brain, when it occurs in the old and feeble. This peculiar degeneration or conversion of a portion of the cerebral structure into a soft pulpy mass, devoid of cohesion, is often met with in connection with apoplectic effusions, of which it is probably the frequent source, those parts most liable to this morbid change—namely, the hemispheres, corpora striata and optic thalami—being the most usual seats of the extravasation. The blood effused in such cases may remain confined in a distinct cavity, or, when proceeding from the rupture o a considerable vessel, may find its way by laceration of the cerebral texture to the surface of the hemispheres, the base of the cranium, or into the ventricles. When a disruption of the brain to this extent takes place the effect is usually overwhelming, and the attack speedily mortal; while it would appear that when the extravasation is of a more limited extent, the disease is less strongly marked, slower in its progress, and attended or followed by paralytic symptoms, but, in general, eventually fatal; and, after death, we find the effused blood in the state of coagulum lodged in a defined cavity and partially absorbed.

The existence of the apoplectic clot and cell was known to the older writers on morbid anatomy; and they were described and delineated by Dr. Baillie in his celebrated work, and afterwards by Dr. Hooper in his "Morbid Anatomy of the Human Brain." In the "Sepulchretum,"* Bonetus relates, in his diffuse but not uninteresting way, the case of a carpenter's wife, aged 47, who recovered, under active treatment, from an attack of the strong apoplexy, and, after the lapse of five years, was seized with a second which proved speedily fatal. On opening the head, there were found considerable vascular congestion, and recent sanguineous extravasation to a great amount into the ventricles and into the substance of the right thalamus opticus, with manifest evidences of previous disease of the brain and its vessels. In searching for the cause of the first attack, by carefully slicing away the brain, Bonetus came upon a half-closed cell or small cavern (cavernulam conniventem) situated in the posterior part of the right hemisphere, over the lateral ventricle. It was difficultly cut into, of an oblong shape, and capable of holding a nutmeg, but contained only a small quantity of clear fluid. A second cavity was cut into in the side of the same hemisphere, also containing a little serum; and under the corpus striatum a third was discovered, the walls of which were agglutinated, but easily separated. All of them, as well as the neighbouring cerebral tissue, were of a dark brown or yellowish colour, of membranaceous consistence and with difficulty divided—the callosity and cicatrisation appearing to have been

* Lib. I., sect. 2, obs. 12, de apoplexia post quinquennium recurrente fortissima a sanguine extravasata.

of old date. They are regarded as having been the depôts of the extravasation which caused the original attack, and referred to as affording a proof that wounds and breaches even in the medullary substance of the brain, may, by the powers of nature aided by art, be united and repaired, so as to enable that organ to discharge its functions with tolerable efficiency for years. This poor woman might, perhaps, have lived longer, had she not contracted irreclaimable habits of intemperance, for she became pregnant and bore a healthy child. The subsequent unhappy alteration in her character and habits was probably a consequence of the damage sustained by the brain; for up to the time of the attack, she was remarkable for steadiness, frugality, and attention to her family.

In the notes to this specimen of double apoplexy are described the appearances presented, at an earlier stage, in another case of fatal apoplexy, where there was found an extensive fissure in the right crus cerebri, containing a concrete coagulum as large as a hen's egg; the serosity from which had poured, through a chink above, into the ventricles, filling them completely.

These relics of former apoplexies have since been the subject of much extended and interesting investigation by several practical writers, both on the continent and in this country, who have traced the successive stages through which the extravasation passes as fluid blood, coagulum, and serum, to its final absorption; as well as the changes which the containing cyst undergoes from its first condition of a rude laceration in the substance of the brain, to a well-defined cavity lined by an adventitious and organised membrane—empty cyst—subsequent cicatrisation, and complete obliteration.

No satisfactory explanation has yet been given of those well-marked and fatal attacks of apoplexy in which we cannot, on the most careful examination, detect the smallest deviation from the healthy structure of the brain. Some ascribe such attacks to derangement of the circulation, or congestion in one set of vessels, which after death may have disappeared, just as the fulness and redness of the face disappears after death. This explanation might be received, if the cases always proved speedily fatal; but as some of those recorded had exhibited for days all the phenomena of apoplexy, it is difficult to believe that a material cause, operating so long and so fatally, would leave no trace behind it. Not more explanatory is the opinion that these cases depend on exhausted energy of the brain, and ganglionic apparatus supplying it with nervous energy. This is but falling back on the *impaired mobility* of Dr. Cullen,—that best abused of medical theorists,—which he alleges to be the cause of certain kinds of apoplexy, particularly those occurring in connexion with gout, epilepsy, hysteria, and noxious vapours.*

A more profitable subject for study and reflection is presented by those morbid actions and changes of structure observable in the vast majority of apoplectic cases. These, indeed, make up a catalogue, copious and diversified, embracing almost every known lesion of the encephalon, from simple congestion to complete disorganisation, and occurring under the most opposite states of the general system. Their variety and complicated relations seem sufficient to account for the conflicting sentiments entertained respecting certain important therapeutic agents, and almost force us to the conclusion, that neither the nature nor the treatment of this important class of affections will be established on a rational basis, till, through the continued investigations of pathologists, apoplexy shall have lost the distinguished rank which it has so long held as a genus among diseases—perhaps its name—and be only known and regarded under the designation of coma, or some other term, as a symptom merely, like

* The peculiar disease of the kidneys, known under the names of "granular degeneration," and "Bright's kidney," is frequently characterised, in its progress, by the supervention of sudden and fatal coma, which does not appear to be connected with either positive disease of the brain, or attended with any of those appearances within the head which would imply pressure or obstruction. On the contrary, in all the cases examined by Dr. Christison, and detailed in his very interesting work, the brain was found either perfectly healthy, or drained of blood, and singularly blanched. The urine, however, had been, in most of the cases, reduced in quantity, or entirely suppressed; and while it exhibited a remarkable deficiency of its usual solid constituents, the principal of these—urea—was discovered abounding in the blood. It might, therefore, be inferred, that some connection subsisted between the coma and the presence in the blood of an ingredient foreign to its natural constitution; but there are some difficulties to be reconciled with such an opinion. In two fatal instances, the patients, under an almost total suppression of urine for many days, retained their intellectual faculties entire to the last; and the complete absence of head affection, notwithstanding that the blood was, so to speak, poisoned with urea, is a fact which this author has repeatedly had occasion to observe in the advanced stages of granular degeneration, but never in its early stage. The subject is one of deep interest; and the ardour with which the chemical pathology of the urine and other fluids is prosecuted in the present day, may be expected to lead to important results, which will serve to elucidate some obscure points in the history of various diseases.

dyspnœa, of various disorders of a vital function. In this way we may, perhaps, be able to reconcile such very opposite practical rules as we find laid down by Dr. Fothergill and Dr. Cheyne (neither of them speculative writers)—the former observing, with reference to the result of his own experience, —"Comparing what has happened to those who have been blooded, and the few I have seen who have not, I am of opinion that bleeding in apoplexy is, for the most part, injurious;" while Dr. Cheyne goes so far as to say,—"I believe it is a good rule to have every patient in apoplexy, who is not plainly dying, blooded."

In the treatment of apoplexy we find general opinion favourable to free and repeated abstraction of blood, as a means both of averting the attack, when threatened, and removing it when present; and the vascular turgescence, sanguineous extravasation, and unequivocal marks of inflammatory action, observed in fatal cases, conspire with experience to justify the practice. There is, however, reason to believe, that this powerful and generally applicable measure has been too indiscriminately recommended, and that, even in cases in which it is indicated, it is frequently pushed to an injurious extent. The propriety of employing blood-letting, and the amount to which it is to be carried, must be determined chiefly by a consideration of the degree of strength, both of the patient and of the disease; and these are, of course, to be estimated by the age and constitution of the patient, the force of the pulse, the temperature of the skin, and the state of the breathing. As many cases, however, are preceded by, and seem to depend on, a really depressed condition of the vital energies, such a condition ought not to be lost sight of in practice, even when manifest signs of vascular congestion, or inflammatory action, are present; and the rule is equally applicable in the precursory stages as in the actual attack.

We have seen grounds for assuming that congestion within the head may take place from a feeble state of the arterial circulation, at least that symptoms usually believed to portend apoplexy are often associated with states of the system indicating the very reverse of excited action, or general plethora, and requiring a mode of treatment differing essentially from that which is ordinarily adapted to apoplectic affections. Dr. Abercrombie, and others, have well illustrated this fact, as connected with excessive losses of blood; but we meet with it sufficiently often, more especially in large towns, under other circumstances, particularly in connection with certain forms of dyspepsia. A person experiencing the exhaustion of body and mind, consequent on the harassing duties and pursuits of a professional or commercial calling, is led by his feelings of depression to indulge in the viands and exhilarating stimulants of the table; giddiness, oppression, and other signs of repletion, in process of time, betray the errors in diet, and, under the apprehension of an apoplectic or paralytic seizure, an opposite regimen is adopted; while the usual amount of physical and mental labour is, from the necessity of circumstances, rigorously exacted. Nervous and hysterical symptoms succeed, with timidity and despondency, feeble pulse, and a temperature of the surface below the natural standard. The most alarming symptoms, however, are giddiness, confusion of head on the least mental exertion unsteady gait, and a tendency to fall in walking. These latter symptoms, if taken as intimations of an apoplectic fit, and treated in accordance with that notion, are decidedly aggravated by sanguineous depletion and purgation; while they are relieved, and often speedily removed, by stomachic bitters, carbonate of ammonia, decoction of aloes, a moderately supporting and carefully regulated diet; and, above all, by a withdrawal from the close atmosphere of the town, the turmoil of business, and the excitement of public events, into the pure air and retirement of the country. A correct discrimination of such cases is, undoubtedly, necessary to a safe practice, and is chiefly furnished by the predominance of dyspeptic and hysterical feelings, and by the absence of soporose symptoms and the usual indications of general plethora and excitement. I have seen a similar train of distressing symptoms in females, from protracted lactation; and Dr. Clendinning, in his clinical reports, has referred to them as not unfrequently attendant on rheumatism of the scalp, and other states of health.

One of the most common errors committed is the premature recourse to bleeding in every seizure of an apoplectic nature. We have seen that some attacks depending on congestion, and even copious effusions of blood, are attended with symptoms very different from those we should, in such cases, expect; namely, coldness, paleness, weak pulse, and actual syncope. The propriety of waiting under such circumstances for reaction, or using suitable means to bring it about, is obvious; but the general prepossession in favour of bleeding in all accidents and sudden seizures is so strong, that the practitioner can hardly resist the popular cry for the lancet.

We are not less apt to err by carrying depletion to an undue extent. The directions to bleed largely and repeatedly can be followed with safety in those cases only which depend on increased determination of blood to the head, and simple congestion of the cerebral vessels. In these, which generally occur in persons under or about the middle period of life, bleeding is, indeed, the only effectual practice: but a majority of the cases we have to treat take place in old people with broken constitutions, and depend, as

we have seen, on an altered condition of the brain, which is itself the consequence of a diseased state, and weak action of its vessels. As there is seldom, in such cases, that general excitement and undue impulse of the arteries in the head, to remove which is the object of bleeding, our depletory measures may be restricted with more advantage and safety to local abstraction of blood by cupping and leeching. Even this mode of depletion must be used with caution and a due regard to the state of the constitution; and where it is imperatively called for to relieve tension and congestion, there will often be a necessity for supporting the general tone of the vessels and nervous power by such medicines as carbonate of ammonia and cascarilla, with a moderately nourishing diet.

Among the effects attributed by Fothergill and others to bleeding in apoplexy, is the induction of paralysis. The occurrence of paralysis in connection with, or as a result of, apoplexy, is so common, that bleeding may have been unfairly charged with being the frequent cause of it. Facts, however, have come under my observation, which satisfy me that the opinion is not altogether unfounded. Some years ago I was called to a tradesman who, on issuing from an alehouse which he too often frequented, fell down in a fit, and was brought home in a state of stupor and partial insensibility, with weakness, but not complete loss of power of his right side. His pulse being strong, I bled him largely, and was pleased to see him become more sensible and less lethargic; six hours afterwards he was in nearly the same state, and finding his pulse still strong and full, I bled him again; but while the blood was flowing, I was distressed to observe his face become hideously distorted, his speech indistinct, and his arm drop to his side. He appeared to be saved by the treatment from an apoplectic attack, but he continued paralytic for three or four years, when he died, in the country, from disease of the lungs. Happening not long ago to be in the receiving-room of a public hospital, a plethoric woman presented herself for advice on account of hemiplegia, which, she said, came on immediately after cupping for some head affection. On mentioning the foregoing case to the physician on duty, he related an example of a similar kind in the instance of a veteran officer who was bled for a threatened apoplectic attack, and, further depletion being deemed necessary, cupping was employed, but hemiplegia immediately supervened on the operation.

Of *emetics*, the employment of which, in apoplexy, has been the subject of much and angry discussion, I have had no experience, never having had recourse to them from a fear of causing determination to the head and rupture of vessels; and I believe that, for the same reason, the practice, though at one time recommended by high authority, has fallen into disuse. Although I have never prescribed emetics as direct remedies, I have so often seen the advantage of encouraging the spontaneous vomiting, which occurs in seizures of an apoplectic nature supervening on a full meal, that I cannot doubt the propriety of Dr. Fothergill's recommendation to unload the stomach with as little delay as possible, when that organ is distended and unable to relieve itself.*

There is more unanimity of opinion on the use of active purgatives, which, of all internal remedies, appear to be the most generally applicable in head affections, and eminently so in apoplexy. This, indeed, we should expect not only from their well-known effect in lessening the general mass of circulating fluids, but also from their direct operation in unloading the alimentary canal, and removing the congestions of the secreting abdominal viscera, so commonly concomitant of apoplexy.

It is unnecessary, after what has been said, to dwell on the importance of avoiding and removing, as much as possible, those predisposing and occasional causes which conduce to the most prevalent conditions on which apoplexy appears to depend. Of these, undoubtedly, the most frequent and influential are habits of free living, which, though not amounting to the excess of intemperance, constitute, particularly if conjoined with indolence, a more powerful predisposition to the disease than any hereditary tendency or physical conformation.

When a seizure of an apoplectic character is directly traceable to errors in diet, and recovered from under appropriate treatment, the necessity of enjoining moderation in eating and drinking is abundantly obvious; but we must guard ourselves, and caution our patients against viewing the attack, in every instance, as simply and merely a stomach affection. With the change of sentiments

* "Farther, it appears that the cause which produces the apoplexy sometimes resides in the stomach, which, therefore, may be expelled by stool as well as by vomit. I knew such a case to happen to a person of distinction, who, being in company with some of his friends, began of a sudden to look wild, presently afterwards was struck speechless, and fell down apoplectic. While some of the most skilful physicians who were called to him believed the case to be desperate, after a quarter of an hour, without any remedy besides bleeding, he vomited, besides the aliments contained in his stomach, a great quantity of phlegm, so large that the human stomach would hardly be thought capable of containing it; immediately after, the senses and motions returned, and being refreshed with a pleasant sleep, he was perfectly recovered the day following, and laughed at the hurry his heirs were in to visit him, upon the message being sent to them."—*Van Swieten in Aph.*, 1017.

gradually taking place on the subject of apoplexy, and adopted and advocated, to a certain extent in this paper, there is some danger that, in our zeal to correct one prevailing error, we may run into another not less injurious in practice; and that in contending for the influence which the stomach exerts on the brain, and the share its disorders have in the production of head affections, our attention may be confined too exclusively to the former, and a material part of the treatment be thereby neglected.

There are, doubtless, grounds for believing that, in a sound condition of the brain, derangements of the stomach, particularly those caused by certain alimentary articles, may produce a disturbance of the cerebral functions possessing all the attributes of apoplexy; but such cases are rare, compared with those in which there is reason to fear the pre-existence of morbid changes of that organ. It is only after years of habitual indulgence in the luxuries of the table that the free liver is called on to suffer, in the form of apoplexy, the penalty of his transgressions against the laws of strict temperance. Now, the brain weakened, partly from gradual alterations which take place as natural consequences of advancing years, and partly from the unremitting operation of exciting causes, feels the full force of inflictions which formerly fell on less noble organs with comparative harmlessness. Of this description are the cases which most usually come under medical care; and it behoves the practitioner not to overlook so important a fact; for though they may not be fit subjects for the "heroic remedies" recommended in books, and commonly held to be indispensable, yet by regarding them in their essential bearings as cerebral, and the derangement of the stomach but an accidental exciting cause, he will be led to pronounce a correct and guarded prognosis, and to enforce that special and very necessary regimen of the brain itself, which consists in a relaxation or entire suspension of intellectual labour and exertion—a careful control of the passions, and a due regulation of the affections and feelings. A patient who entertains the belief and cherishes the hope that his attack, however alarming in appearance, was only a foul stomach, will not be very strict in his observance of any regimen; but if faithfully warned that a vital part is seriously endangered, he will be disposed to put a restraint on those habits, emotions, and appetites, which, under a different impression, he might be inclined to indulge and gratify to a hurtful excess.

ILLUSTRATIONS OF THE

PATHOLOGY AND TREATMENT OF AMAUROSIS.

By Edward Hocken, M.D.

Part IV.

Hydrophthalmia from Chronic Hyaloiditis.—Treatment.

I proposed in my last paper to commence the present with a well-marked case of hydrophthalmia from chronic hyaloiditis, which would at all events prove that the pathology or nature of the affection is occasionally an inflammation of that tunic leading to an increased secretion of its normal contents. But must we always call disorganising processes, attended with an increased fulness of the vessels of the part, inflammation? If so, then is hydrophthalmia always an inflammatory condition of the hyaloid membrane; if not, it is usually an insidious, chronic, and disorganising process, specifically marked by increased secretion. But we do see such processes at work under various circumstances, and yet without any shadow of title to the epithet inflammatory. The ciliary circumference of the cornea becomes opake, and otherwise changed in structure from old age; nay, I will not say old age, but advanced age; the lens and humours, the retina and pigmentum nigrum, change from the same causes—they are not inflammatory: tumours originate in various parts of the body—parts undergo various transformations, and still are not of an inflammatory origin—so that mere change of structure, size, and situation, are not *necessarily* connected with inflammation.

The following case probably implicated the retina, which may have assisted in the production of the amaurosis conjointly with pressure on its concave surface.

Elizabeth Ward, 21 years of age, a full, florid, unhealthy-looking person, is rather short, with a thick short neck, and small thick features. She has been subject to frequent attacks of giddiness, and is extremely nervous and excitable. The left eye was lost during childhood from a blow; it presented, during her present condition, a shining, shrunken, corrugated, capsular cataract—the cataracta arida siliginosa of German authors; the eye was sunk in the orbit, and considerably atrophied.

Preceding and Incipient Symptoms.—She states that she was always near-sighted (at least as long as she could remember), but could see perfectly when objects were placed sufficiently near. Her present symptoms came on suddenly, in the November of the year 1839, whilst actively employed in digging potatoes—she suddenly found her sight become dim and indistinct whilst thus em-

ployed: her sight became affected without any other well-marked symptom, and has continued to deteriorate gradually from that to the present time (May, 1840). The augmentation of the amaurotic symptoms has been occasionally attended with sensations of muscæ, sparks, &c., deep-seated pain in eyeball, and occasional pain in the ear, frequent headach, vertigo, and pain over the brow.

Symptoms.—She states that her sight is very imperfect and confused, but less so during the morning; that on first entering a brightly-lighted apartment her sight is somewhat improved, but that as the light is painful to her she sees best for any continuance in a comparatively darkened room: she has almost constantly unpleasant sensations of dark or luminous bodies flitting before the eye, sometimes a thick mist seems to intervene between herself and surrounding objects; her head and brow pain her, especially the former, from excitement; her general health otherwise is good, but she professes herself to be "weak and nervous."

The aspect is not vacant, and the axes correspond; but the pupil (*right*) is dilated, and its motions slow and limited; whilst the iris is protruded forwards, diminishing the chambers; the eyeball is unnaturally protuberant and exposed, much firmer and harder than natural; the lids healthy, but forced asunder by the globe; the sclerotica uniformly thinned, and of a deep blue colour from the subjacent choroid; anterior ciliary vessels formed a slight zonular halo around the circumference of the cornea, and a few dilated conjunctival vessels passed inwards from the recti branches. Her pulse was excitable and quick, but readily compressible; the appetite and digestion good, the bowels open, and the catamenial flux normal in quantity and regular in appearance. When first treated in November, 1839, she states that the general dulness of sight yielded to hemiopia * on the right side of the affected organ by the application of leeches, but that this hemiopic condition of vision lasted only ten days, or a fortnight, when the original derangement of vision returned.

Diagnosis.—Chronic hyaloiditis; amaurosis from pressure on the concave surface of the retina; complication of the retina in the inflammatory process.

The treatment employed consisted chiefly of local bleeding by cupping at the back of the neck, the *colocynth and tartarised antimony pill*, one-twelfth of a grain of the latter to five of the former, &c.

Not the slightest improvement resulted from these measures, and the patient was discharged at her own request, after some months' residence as an in-patient of the West of England Eye Infirmary.

Remarks.—The inflammatory nature of the affection was diagnosticated from the small, straight, zone of vessels which surrounded, but fell short of the cornea, the false appearances of light, and the pain over the brow. Again, we have a striking instance of the diagnostic symptoms exemplified; the uniformity of the sclerotic attenuation yielding chiefly in the recti interspaces, and the complete failure of common methods of treatment. The advantage of a comparative examination into the degree of resistance offered by the two globes to the examining fingers was lost in this case, since the left eye had been atrophied from childhood; but the sign itself is but of little importance, as I explained in my last paper; and an accurate estimate may be formed simply from a practical knowledge of the hardness of the healthy globe; this being nearly alike in all adult eyeballs. A few large conjunctival vessels ramified in its structure, but that reflected on the lids was free from complication, hence the eyeball was preternaturally exposed, and the upper eyelid uncongested. In such cases it is that Dr. O'Beirne's observations have any value. As regards the effects produced by the application of leeches, we can only imagine that cerebral congestion was primarily induced by the exertion and position whilst at work, in a probably predisposed individual, and that the means employed partially relieved this condition; whilst the congestion of the vessels of the eyeball continued, and ultimately led to the subsequent effects. I shall not here digress on any theories relating to the production of hemiopic vision, such as Wollaston's opinion of the decussation and ultimate distribution of the optic nerves, &c., but simply remark, that it here existed on the right side*—the right half of objects only being seen, its short continuance, and the return of complete dulness. Was this return the consequence of the commencement of the inflammatory process? During the patient's residence in the West of England Eye Infirmary, scarcely any fever could be said to exist; in fact, the health was but little decayed: she was, however, decidedly hysterical.

Treatment of hydrophthalmia. Our treatment must be based on the three following points:—First, a correct diagnosis of the disease itself; second, of its intimate pathology; and third, an experimental knowledge

* This, I think, incontestably proves that the blindness was not occasioned primarily by pressure from dropsy of the vitreous humour; its sudden occurrence also, whilst using exertion in the bent position, looks like amaurosis from congestion.

* Mr. Abernethy ludicrously observed, whilst treating of his having suffered from an hemiopic attack, that in his own name he could see as far as the "*ne*," but not a bit of the "*thy*."

of the action of particular remedies;* the whole being modified and adapted to individual cases. As I have before remarked, the ordinary treatment almost invariably fails to produce beneficial results, and ultimate recourse is had to paracentesis oculi, with repetition on the re-occurrence of severe symptoms. Beer goes so far as to propose a section of the cornea, as in extraction, and thus to evacuate the humours, and occasion collapse of the eyeball.

The plan I would recommend is the following:—if symptoms indicate the propriety of depletion, let a few leeches be applied to the temples, at regular intervals; at the same time maintain an efficient extent of counter-irritation, by a seton, or the tartar-emetic ointment, at the back of the neck; regulate the functions of the bowels by suitable medicines; and improve the general health by every means in our power. But what I would especially call attention to is, the remarkable influence which turpentine possesses over similar disorganising processes. I have too often witnessed its decided powers in very chronic changes to doubt its efficacy. Now, although I have as yet had no opportunity of fairly testing its effects in hydrophthalmia, yet from analogy I infer, that it would be most likely to induce reparative processes; at all events, it merits a careful trial. How important ‘d it be to find a method of treatment ..le of even suspending the symptoms, ..d preventing their advance! Turpentine, in small and regular doses, holds out the best chance of accomplishing these ends, if not of procuring a perfect cure.

The dose should be small, and continued regularly; half a drachm to a drachm, two or three times a-day, in almond emulsion, containing a small quantity of the sesquicarbonate of soda, in solution, and some agreeable syrup to cover its unpleasant taste. Mr. Carmichael's observations on its employment in iritis are judicious: he gives an excellent formula for its administration. I have seen this plan of treatment especially useful in the most chronic forms of choroiditis; the natural appearances of the globes and healthy vision being restored by its continued and judicious employment. It succeeded in a patient in whom one eye was first affected, and the symptoms suspended, with occurrence of an exactly similar disease† in the opposite organ, again yielding to the careful administration of turpentine.

* Treatment founded simply on the last of these three divisions is empirical, and most dangerous, in passing from isolated facts to general application, inasmuch as it regards symptoms only, without reference to their pathological causation.

† For some remarks on the analogy of sympathy, vide the author's third paper.

INHALATION OF IODINE AND CONIUM IN TUBERCULAR PHTHISIS.

To the Editor of THE LANCET.

SIR:—I desire to avail myself of the pages of your widely-circulating Journal, again to advocate the merits of a subject in which I must feel an untiring interest; and which can scarcely be less interesting to every member of the medical profession, and to every friend of suffering humanity. It is the treatment of tubercular phthisis pulmonalis, and the use of the inhalation of iodine and conium, as constituting the most important of the remedies which I have to recommend.

In my former reports, I have had too much occasion to express my regret at the supineness of the profession at large in regard to inhalation; but I have now the satisfaction of stating, that I have received numerous communications from different parts of the kingdom, and some from abroad, giving me full and gratifying assurance of the great value of the remedy in question; of the sensible relief which it almost invariably affords; and of not unfrequent success in the removal of existing disease. Yet I am well aware that a great part of the profession have not thought proper to pay any attention to this new method of treatment; and some, I must say, are so illiberal as to condemn it on theory, never having tried it, choosing to assert that the vapour of iodine must be an irritant to the lungs, and, *ergo*, whatever irritates the mucous membrane must be injurious, and tend to aggravate the tubercular disease. All this is merely gratuitous assertion, and is directly contrary to fact. I am well convinced that the more this remedy is adopted, and carefully studied and understood, the more will it be approved. Let it not, however, be imagined, that I claim for it, boastfully, the power of curing the tubercular disease of the lungs in its worst forms; or that I allow myself to speak of tubercular phthisis as curable in a general sense; which might serve to imply that it is not the dangerous and commonly fatal disease which it has always been considered to be. My zeal for the remedy has never carried me to this imprudent length; but I may, on the other hand, be excused if I do not join in the despondency of those who almost shrink from contending with the disease, and who send away the unfortunate patient, in any stage of the disease except quite the last, to another climate. I hold this to be an exceedingly wise measure in certain cases of the threatening of consumption, especially in young persons, whose

constitution is not yet fully developed; but I also strongly condemn it, when serious disease has become established, requiring for its treatment the nicest means of art, and not a mere contentment with change of air, and climate, and attention to diet; advantages which are wholly inadequate to the cure, and too often insufficient even for the suspension of the disease. There are two conditions in which it is advisable that the invalid should pass the winter and early part of the spring in a favourable climate—the one already named, of the threatening of consumption at the early stage when the constitution is hovering on a doubtful balance; and the other, for the purpose of counteracting relapse when a recovery from danger has been effected.

I am at a loss to know on what reasonable ground objections can be offered to the inhaling treatment in cases of consumption, in which the usual failure of all ordinary means is universally admitted. Besides that, the practitioner may use, in conjunction with it, any other measures to which he is attached: nor do I confine myself to the use of this single remedy—quite the contrary. I estimate very highly the advantages of counter-irritation; the modes of which are to be varied according to the case, and the choice is to be made between seton, issue, blisters, the solid or fluid, irritant liniments of different kinds, and rubefacients. As a general principle of practice, I advocate the use of tonics, which are various in their kind, and are to be chosen with reference to the particular case and constitution. Any accidental complication of other disease with that of the lungs is to be well considered; as disorder of the liver, and a morbid state of the mucous membrane of the intestinal canal, requiring a combined and alterative treatment. The administration of sedatives at night, when required to assist the sleep, allay cough, and prevent the wearying effects of restlessness and watchfulness, is very important. I always desire that the diet should be more than usually supporting, having due regard to the peculiar circumstances of the individual case and constitution.

Let it not, therefore, be said, that I have adopted the inhaling treatment on narrow grounds, and upon an empirical principle. When the idea of the remedy first* occurred to me, I reasoned on the probability that so active an agent as iodine, brought into immediate contact with the seat of disease, might be more effective in its influence than any other ordinary treatment; and I rejoice to say, that to a very great extent my most sanguine hopes and expectations have been fulfilled.

It will, perhaps, be said, that in the successful treatment of a case of consumption, so many other useful means being employed besides inhalation, it would be unjust to allow much credit to the latter remedy. But I assert that before I thought of it, and had recourse to it, I had, in very numerous cases, year after year, made use of all other known means of treatment in vain, sharing the common lot of failure of success; and I beheld consumptive disease as one beyond the reach of art. The power of iodine inhalation in controlling immediately the hectic fever, is no less remarkable than satisfactory.

In the volume of this Journal for 1834, I related a case, which had been treated by Dr. Skrimshire, of Peterborough, and who, when he did me the favour to recommend the patient to my care, gave me the following statement:—"This gentleman is the subject of rapid tubercular phthisis. During the few weeks that he has been under my care, we have had recourse to occasional leeching, tartar emetic ointment and blisters, to acetic acid, to digitalis, hyoscyamus, &c. I have not, however, at any time, reduced the rapidity of the pulse, or the urgency of the cough for more than a day or two; the wasting has been progressive and rapid, and the expectoration, though never profuse, has, for the last three or four weeks, been puriform."

Nothing could be more satisfactory than the effect of inhalation of iodine and conium in this case. The hectic fever was immediately checked; the pulse, in a short time, became moderate, and every unfavourable symptom gradually gave way, so that the patient perfectly recovered, and he remains well up to the present day; and this is a happy and important point, which I would

* Ten years have elapsed since I published the first edition of my Treatise on Inhalations, and I had made trials of the method for a long period before I published the results. About the time of my publication, Dr. Murray, of Belfast, made known the good effects of breathing iodine vapour diffused through the apartment; and, subsequently, Dr. Corrigan, of Dublin, has given his results from a similar mode of conveying iodine vapour to the lungs, using, however, a different method from Sir James Murray in procuring it. Either plan is altogether different from mine, of *direct* inhalation by means of a glass inhaler, so that the exact dose is as accurately administered as in the use of any internal medicine. Besides which, I claim credit for the superiority of the preparation of iodine which I employ, or rather its combination; and for the important modification of its action on the mucous membrane, which is derived from the addition to the iodine mixture of a saturated preparation of conium. I sometimes add ipecacuanha. In spasmodic asthma, I use other volatile medicines alternately with the iodine and conium.

dwell upon with the highest gratification. The recoveries which I have at different times related, having given the details of the cases, have not been for merely a short period—a delusive convalescence, to end only in the bitterness of disappointment in fatal relapse, but lasting restoration to health and enjoyment. It is equally true, that I have often been consulted in the last stages of this sad disease, or, in some examples of its most inveterate nature, at an earlier period; and in either of which difficulties, if I had sought only the care of my own reputation, I would not have used inhalation, being certain of eventual failure; but the superior consideration of humanity always led me to employ the remedy for the sake of palliating suffering. A gentleman thus circumstanced with hopeless disease, declared that, although he was too well convinced he could not possibly recover, he wanted language to express his gratitude for the exceeding comfort and relief which he received from inhalation. It surely ought not to be stated as the reproach of any method of treatment, that it will not always succeed. In diseases of other organs of the body, as the stomach, the liver, or kidneys, or other parts, human skill will sometimes fail. How much greater is the difficulty of contending with disorganisation of the lungs?

Yet, even in some very aggravated cases of tubercular excavation, I have been agreeably surprised by the recovery of the patient. In the case which I reported in the "Medical Gazette," vols. for 1840, the prognosis at first could only be unfavourable. Mr. King, of Portland-terrace, Regent's-park, attended the patient with me. I extract from his written statement the following particulars of the case:—"The left lung gave strong puerperal resonance; the right lung was pectoriloquous, from the root to the mamma; there was much gurgling, and percussion was dull over the greater part of the right side; it was also much smaller than the left, and hollow at the clavicle. The body was much reduced; he had profuse hectic sweats, and the expectoration was copious, puriform, and very offensive; the pulse rapid. His debility was so great, that, to use his own words, he felt to be dying from day to day. The night perspirations were most profuse, and he was often sleepless. On the first inhalation, he expressed himself very sensibly relieved; afterwards his breathing was never oppressed in going up-stairs, as it was before using the inhalation; and with a little more interval, he was able to walk two miles without fatigue."

I have lately seen this patient, and have the satisfaction of finding that there is every evidence of the cavity being almost healed, and the restored condition of the patient; his improved complexion, formerly so swarthy, from the imperfect function of the lungs; his increased bulk and accession of good strength, with altered spirits; and his former despair changed to confidence of attaining health, formed a picture at once most pleasing and satisfactory.

In the last winter I attended a gentleman, with Mr. Carter, of Dorset-street, who laboured under the most alarming symptoms from chronic bronchitis, and whose appearance wore the strong stamp of the last stage of tubercular phthisis. He was emaciated, and reduced to great debility; the pulse rapid; respiration laboured and quick; cough extremely harassing, with foul and profuse expectoration, frequently also coloured with blood; perspiration excessive; nights sleepless, and the apprehension of death. I persuaded myself that no ulceration had taken place, and I ventured to hope for success. Mr. Carter can bear his full testimony to the admirable effects produced by the inhalation of iodine and conium. The patient perfectly recovered.

Recently I have had a young gentleman under my care, recommended to me by Mr. Norton, of Dorset-street, whose appearance was strongly consumptive. He was thin, pale, and much debilitated; night perspirations excessive; little sleep during three weeks, and the cough almost incessant day and night, with sputum of a suspicious character; oppression of the chest, with the breathing much hurried on slight exertion; loss of appetite and spirits; the pulse frequent and weak; the animal heat 99° to 100°. Respiration was scarcely audible over any part of the left side, and on percussion there was general dulness. The evidence of great tubercular obstruction was very clear; the signs on the right side were favourable. Already the happiest results from inhalation and other treatment have been produced. The cough became immediately relieved: appetite, sleep, and spirits have returned. At my first visit he was fatigued and distressed by only slight exertion; and now he can, without difficulty, walk three or four miles. In a word, the patient expresses himself to be getting well. I confidently expect his recovery.

With all the experience, therefore, which I have now enjoyed of the *methodus medendi* in consumption and chronic bronchitis, I trust I may be allowed to express myself in terms of that warm confidence and satisfaction, which a few trials and a shorter experience would not have warranted; and I will repeat the observations which I offered in my preface to the second edition of my Treatise on Inhalation.

"With my recorded conviction that the use of iodine by inhalation is productive of results highly and permanently beneficial; and that the constitution which prohibits its continuance is peculiar, and a rare exception to ordinary experience; I must express my earnest hope that the subject may receive

from the profession at large such a full and dispassionate attention as is suited to its importance. It is not on selfish grounds that I advocate the practice. What concerns my reputation or advantage is personal and transient, and of little moment: what relates to science and to the interests of mankind, is for all ages, and of inestimable importance."

Deeply impressed, therefore, with the good results which my long experience had afforded me, I became desirous of contributing my exertions towards the establishment of an institution for the relief of the poor afflicted with the diseases of the chest; that class of the community whose sufferings in illness are so bitterly aggravated by the stings of poverty, and who cannot command, like those more gifted by fortune, the advantages of good attendance and expensive medicines. I am happy to add, that this institution has taken root under the title of the *West London Dispensary for the Diseases of the Chest*, situate in Wells-street, Oxford-street.* During the last year great relief has been afforded to upwards of two hundred sufferers from consumption, bronchitis, and other affections of the air-passages, and from complaints of the heart; and many important cures have been effected. Very abundant further evidence has been obtained of the remarkably curative influence of inhalation; and to this mode of treatment, it is only justice to say that Mr. Carter, the acting surgeon of the institution, has paid the utmost attention, and with very great success.

It is always pleasing and satisfactory to me to quote the experience and the testimony of others, in regard to inhalation; not only as rendering a flattering support to my own views and opinions; but as affording an additional basis for the judgment of the profession at large. Up to a certain point scepticism is justifiable, and serves an useful purpose; but beyond that it sinks into unworthy and injurious prejudice. I am, Sir, your very obedient servant,

CHARLES SCUDAMORE, M.D.

Wimpole-street, April 13, 1841.

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* It is fully intended, as it is most earnestly desired, that this institution should grow into an infirmary or hospital for the reception of patients; the building being so constructed as to allow of the best system of ventilation in unison with regulated temperature; so important a desideratum in the treatment of pulmonary disease. The committee of management will wait only for the necessary funds, to enable them to carry out this great object into full effect.

NEW OPERATIONS—SQUINTING AND STAMMERING.

To the Editor of THE LANCET.

SIR:—The whole history of surgery will scarcely, perhaps, exhibit such an extraordinary number of new operations, and such a number of extraordinary operations within the same given period of time, as the last twelve months have produced. A perfect mania for operating has existed ever since the first operation for squinting was declared to be successful: supported and encouraged by the results of the experiments of Delpech, Strohmeyer, Von Ammon, and Dieffenbach.

Although the application of the operation for dividing muscles has been made but very recently to strabismus, yet it was previously employed for the removal of deformities affecting other parts of the body, resulting from a similar cause. Von Ammon, in his work "De Tenotomiæ Physiologiâ," says, "Roonhuysen, Meekren, Tulpius, Blasius, and Ten Haaf, were among the first who divided the sterno-cleido-mastoideus muscle for the cure of wry neck; but notwithstanding they were successful, the operation afterwards fell into disuse. Thilenius again brought it into notice, and towards the end of the last century extended it to the division of the tendo Achillis for the cure of talipes, in which he was followed by Michaelis and Delpech. Strohmeyer, a Hanoverian physician, afterwards performed these operations, having first informed himself, by repeated experiments on animals, of the laws which regulate the reunion of divided tendons." The experiments which Professor Von Ammon instituted on horses are highly interesting, and the following abstract of them will serve to illustrate the subject:—"His experiments were six in number; and from them we gather, that the first effect is the formation of a coagulum of blood closely covering the ends of the divided tendons, and adhering to them. In the course of a couple of days, some appearances of coagulable lymph were observed, principally at the lower extremity of the tendon; these, in a day or two more, were much more evident, and the lymph adhering to either end of the tendon had become conical and organised. The space between the divided parts was filled up by lymph. One of the horses was killed a month after the operation, when the cicatrix was found to be perfect, and there were no signs of adjacent inflammation; but the edges of the new tendinous mass, which was above an inch long, could be readily distinguished."

Within the last few months, a perfect mania for operating seems to have seized the profession, every member of which appears to be desirous of becoming a Cooper or a Dieffenbach: not content with bringing

some hundreds of squinting eyes straight (a few being put out and destroyed in the attempt), we have now operators who straighten the crooked back, by cutting out a portion of its motor muscles, who remove the false anchylosis of the knee by dividing the hamstring tendons, and who set a crooked head straight on the shoulders, by cutting across the tendon of sterno-cleido-mastoideus: nay, one surgeon is reported to have divided the *sculenus anticus*, but that I suppose was done on the dead body.

The last grand series of these bold and violent operations will serve as the very climax thereto. Dieffenbach, Amussat, and others, have brought forward operations for curing stammering, as if the nervous impediment of speech depended on a mechanical obstruction. Amussat's operation, consisting simply of the division of the genio-hyo-glossus muscle, is only dangerous in the hands of a man unacquainted with anatomy, as he might wound the ranine artery, an accident which really has occurred. Dieffenbach's is one of the most horrible that can be imagined, and I must say I think there are few in this country would submit to it. The frightful attendant hæmorrhage, and the great risk of losing the tongue, or the life, would serve to deter every body; nor can I believe any English surgeon could care so little for his patient's life and his own reputation, as to recommend it. The remaining operation, removal of the tonsils and uvula, is said to have been successful in many cases; but an instance thereof in the "Literary Gazette" of last week tells wonderfully against it, while, at the same time, it strongly corroborates the remark I made in the commencement of this paper, that such is the eagerness for operating, that proper cases are not selected, and many are made to undergo the discipline of the knife, who might be cured without. The patient alluded to, after losing the tonsils and uvula, by the operation for the cure of stammering, was found to stutter worse than before the bistoury was used, and yet when placed under the hands of a master of elocution, spoke *plainly in ten minutes*, to the astonishment of all who heard him. The removal of diseased tonsils is an every-day operation: I have practised it myself, but its applicability to the relief of stammering, is with me a matter of great doubt.

While the rest of the human body thus formed the subject for various experiments, it was not likely that the important organ of hearing should escape. Accordingly, we find an operation called catheterism of the Eustachian tubes much advocated at present in this country, although it is already failing in popularity abroad; it was first performed, as I believe, by Guyot, a postmaster at Versailles (as I mentioned in my treatise on the ear upwards of twenty years since), who invented a syringe with which he injected his own Eustachian tube through the mouth. Cleland afterwards passed a flexible catheter into the tube through the nose; and he was followed by Wathen, whose cases have been republished in my "Essay on the Deaf and Dumb." It was afterwards revived by Itard, who made many important modifications in it. Saissy, Deleau, and Kramer, also wrote upon the subject. Deleau, whom I have seen operate, seldom used the large air-pump, but preferred a small pair of ivory bellows, which were inserted into the catheter, and worked with one hand.

The use of the catheter, for the purpose of removing obstruction of the Eustachian tube, has lately obtained an unenviable notoriety, from the fatal effects which followed its use in more than in one instance. I have myself seldom resorted to it, having long been persuaded that it is neither simple nor harmless; and that even in the most experienced hands, it is quite as likely to prove injurious as beneficial. It has often been said, that "fools rush in where angels fear to tread," and, assuredly, nothing is a greater mark of ignorance than presumption. Bold operations are often undertaken by men, least qualified to conduct them with success, by way of speculation, as it were, hoping that, if, in spite of their incapacity, the matter should terminate well, they will gain credit, practice, and wealth, by means of their good fortune. I am, Sir, your obedient servant,

JOHN HARRISON CURTIS.

2, Soho-square, April 2, 1841.

ON THE

ECTROTIC METHOD

OF

TREATMENT OF SMALL-POX.

To the Editor of THE LANCET.

SIR:—In THE LANCET for February 2, I saw an extract from a paper read before the Parisian Medical Society, by Dr. Olliffe, President of the Council, on the Treatment of Variola, by the "Ectrotic Method." That mercury exerts a specific influence on variola, I have long known, as long ago as the year 1796. During my apprenticeship in this town, in that year, my master and I inoculated between three and four hundred persons in one day. The preparation consisted, in time, of three weeks; in diet, of abstinence from animal food; and in medicine, of nine doses of calomel, varying, according to age, from one to five grains. The issue was, that all those who strictly complied had a very mild distinct sort, ranging from about fifty to one only, and that the part punctured, and the eruptive fever, were not more than that from vaccination of the

ninth day. The extract from Dr. Mason Good's valuable work almost fully corroborates and establishes it, bearing in mind Sir George Baker's remark, respecting the hospital physicians' observations.

That it does so, then, will, I trust, be considered as an axiom; but what is its *modus operandi*, that is the question. Von Wenzel's experiment, with calomel, surely cannot explain it; that it renders it inert and useless I doubt not, from its caustic quality; but surely this cannot be the case in the system. As every other means, M. Serres' Méthod Ectrotique; M. Velpeau's removal of the apex of the pustule with the point of a lancet, and introducing into its cavity the sharpened end of a piece of nitrate of silver; M. Eichhorn's vaccination after the eruption; the ancient Arabian method of puncturing each pustule, and expressing the matter; Dr. Picton's plan of total darkness; M. Legrand's plan of gold leaf; the application of the oil of almonds, *cum multis aliis*, have failed, it is clear this is the only rational and effective plan.

The external or topical use of mercury, commencing, like most other grand discoveries, by chance, occurred to Malouin, related in his Chimie Médicinale, and was pursued by several others; partially, but efficaciously, by Dr. Podaliri; till M. Serres commenced his researches, which have been continued by many, and which have lately, in the hands of M. Briquet, been followed by the most decisive and valuable results. From all which it appears, that if the external use of mercury be commenced immediately on, or within a day or two after, the appearance of the eruption, it never proceeds to suppuration. This effect takes place by a process totally different from that which is produced in varioloid affections. In the latter, it is to be attributed to the prompt desiccation of the vesicle, whilst in variola the pimple does not open at all; no pus appears; no scales are formed; resorption is effected; and, consequently, no scars can possibly occur.

M. Serres asserts, that resorption takes place when suppuration has taken place: but M. Briquet's researches prove that the appearance of the pustules, in a suppurating state, renders the effect of the mercury altogether void. He, in thirty cases, applied the Vigo plaster *cum mercurio*, to some of the most grievous kind, with unparalleled success. Friction with the mercurial ointment produces the same effects as the Vigo plaster.

Near the conclusion of your extract the doctor says, "I think it will now be admitted by all, that mercury acts specifically; that it exerts a special action on the virus, whilst the latter yet exists in the papular state; but that it is often powerless when the pustules are developed." And further on, "Let us now conclude that the topical mercurial treatment commenced by M. Serres, and improved by M. Briquet, is the most salutary, and affords the fairest chances of success; that it is applicable to variola in all the diversified forms assumed by the disease; that it never gives rise to dangerous accidents; that if timely and properly applied, it changes the nature of the eruption; and, finally, that it is all-powerful as a preventive of cicatrices. For my own part, I look on it as almost infallible. I adopt it as my polar star in the treatment of those cases of variola which cross my professional path."

Now, in the hope of stimulating others to the laudable task of explaining the *modus operandi* of the specific, I venture my little bark in the ocean of medical opinion.

The variolous contagion, whether received into the system of a person who has not previously been subject thereto, or who is susceptible thereof, either by aura or inoculation, produces, after a certain time, if we may be allowed the expression, a fermentation in the blood, which in due time throws to the skin a crop of pimples, which gradually inflame and enlarge till they suppurate, and are followed by scabs; and the danger to the constitution is proportionate to the quantity thereof, *cæteris paribus*. From the foregoing experiments it appears that mercury, whether internally taken or externally applied, before, or at the commencement of the attack, not only mitigates, but actually arrests the course of the disorder, and that if applied some time before, prevents the eruption; and immediately after, it confines it to the state of papulæ, with impunity to the constitution.

We observe in those who live freely, or whose blood is most impure, the most violent fermentation, and a confluent crop of pustules, and consequently the greatest danger. Now, what is it which renders the blood impure? My answer is, a vitiated secretion of bile; remove this, and establish a healthy secretion, which I look upon as the grand *vis medicatrix artis*, allowing the benignant *vis medicatrix naturæ* to exert her salutary influence; and this gracious task she is ever ready to perform oftentimes to the wonder of the physician, when the impediment is removed. If the biliary secretion be bland and healthy, Hygeia will be present; the blood pure; the constitution will bid defiance to variola, and most other enemies; and the blood may be so pure, as to deny even the introduction of the variolous or vaccine virus.

To the operation, then, of this mineral on the important gland, the liver, may not these merciful effects be attributed! And may we not also attribute to its external use the non-maturation of the pimples, and their suspension and death, to its well-known power of stimulating the absorbents, and emulging, by their channels, and inducing a

healthy action of that important viscus? Following this train of thought, it would be arrogance in me to presume further; it is enough that I have called the attention of the medical world to the momentous subject. I would briefly hint, that we be cautious in its internal and external use, for we know that excessive salivation is highly dangerous; and we also know, that some are very easily excited thereto, by even a few grains; whilst others require prodigious quantities: between these two extremes there is every gradation, so that we should adapt the means to the end, and no more.

How the transit of the variolous poison through the cow should rob it of its power to ferment the blood, occasioning it to throw its extraneous particles to the skin, is a mystery alone known to the great First Cause. That it does so is clear, to the extent of preventing the general eruption, and yet giving to the constitution full prophylactic power, of which the following is one, among tens of thousands of proofs:—About twenty-five years ago I was sent for to a woman in labour; her husband, who came for me, informed me that in the same room with his wife were his two children, ill of small-pox; having some recent vaccine lymph by me, I determined, if the parents were willing, to introduce a charged point into each arm of the infant, at the moment of birth; I did so, and the result was most gratifying, the vesicles presented their usual appearance, and the infant, now a healthy man, resisted every trial to variolate him at that time, and repeatedly to the present time.

I will now conclude by adverting to the fact, that after the eruption has continued nearly to maturation, no good is produced by the use of mercury; no: is it not because it has not time to effect an emulging of the liver, if congested, and a healthy secretion of bile? Fearing I have already trespassed too far, I am, Sir, your obliged humble servant,

THOMAS POPE.

Cleobury Mortimer, Salop,
April 5, 1841.

*** We have omitted the preface to our correspondent's letter, as containing no facts bearing upon the subject discussed.

COLLECTION AND PRESERVATION OF HYOSCYAMUS.

To the Editor of THE LANCET.

SIR:—As the season for gathering medicinal herbs is approaching, I beg to offer a few observations on collecting and preserving hyoscyamus, which I hope will be acceptable to those practitioners who wish to give this important article of the materia medica a fair trial. I know from personal observation that sufficient attention has not been paid to the subject; from which circumstance practitioners have been led to form a wrong opinion respecting the medicinal powers of the plant.

Writers of high character are not agreed respecting its duration; some state that it is an annual, others that it is a biennial; whilst the Apothecaries' Company, in their "Catalogus Rationalis Plantarum Medicinalium," leave it in doubt, and say, "biennis sive annua."

I have known this plant of doubtful duration forty years, and have seen it growing in various parts of this country in its wild state. I cultivated it for several years in my garden, and from what I have seen I am quite satisfied that it is a biennial; and such is the opinion of the herb-gatherers with whom I have conversed on the subject. If there is, as some assert, an annual variety, it is rare as an indigenous plant. I wish those who call it an annual would give its habitat as such; I only know it as a biennial, which bears fine petiolated leaves in the latter summer months of the first year of its duration; the plants at this period are called by the gatherers seedlings; their leaves are very specious, and meet with a ready sale in the market: if carefully examined, they will be found to possess but little of the clamminess and fœtid odour that belong to the true medicinal leaves: their footstalk is the positive characteristic of the first year's leaves, which are not fit for medicinal purposes. I have asked the gatherer why he carried about the seedling leaves; his answer has been, "A cos they like 'em better than t'others, cos there a'nt no stalk." These leaves die down to the root in the autumn, at which time the root has attained its mature state, and is in full possession of its poisonous properties. In the following spring the root sends up a curious tuft of small light green woolly leaves: a stem soon rises, plentifully furnished with leaves which have no footstalk, but closely embrace the stem; they feel clammy, and send forth a strong and unpleasant odour, very similar to that of the leaves of the black currant. These are the true medicinal leaves, and are in perfection when the plant comes into flower. I prefer them as soon as the first flowers open; the plant flowers in June; the period varying with the temperature of the season. Now to guard the practitioner in large towns, where he must depend upon the herb-collectors for his supply, I would advise him to have the leaves brought to him on the flowery stem. On receiving the herb, if it should not be convenient to strip off the leaves at that time, the flowering heads should be cut off immediately, and the plants strewed separately, in a dry but not a dark place. These cautions are important, and are proved to be so

both by physiology and experience. When the leaves are separated from the stem, they should be dried, without artificial heat, as quickly as possible in the open air, on some water-proof substance: when they are a little dried, the midrib should be removed; which may be done with more facility than when they are quite fresh; at the same time, the large leaves may be divided transversely, and as the drying process goes on, it is as well to have the leaves rolled carefully between the hands into small loose masses; when quite dry, they should be kept secluded from the light and the atmosphere. From hyoscyamus thus prepared, a tincture may be produced, after the form of the Pharmacopœia, that will be veritable, and seldom disappoint the practitioner.

I have said nothing respecting the extract of henbane; it will be understood that the medicinal leaves are to be used, and not the seedling leaves. If it be desired to give the plant a fair trial, in the form of extract, I advise that the expressed juice should not be vexed over the fire, nor steamed, nor air-pumped, but simply inspissated in nature's own apparatus—by spontaneous evaporation. I am, Sir, your obedient servant,

JOSEPH HOULTON.

London, April 24, 1841.

KREOSOTE IN VOMITING OF BLOOD.

To the Editor of THE LANCET.

SIR:—Having met with three cases of severe hæmatemesis in which the efficacy of kreosote and of the acetate of lead was clearly shown, I send them to you for insertion in your widely-circulated Journal, and have the honour to be, yours obediently,

CHARLES GRAVENOR.

42, Castle-street, Holborn.

In November, 1838, I was summoned to visit a servant in Holborn, who had just been attacked with vomiting of blood, and when I arrived she was ejecting dark blood in considerable quantities. She was middle-aged, of a spare habit, and subject to great derangement of the digestive functions. I ordered her to take half a drop of kreosote in mucilage every half hour: this, after three or four doses, effectually stopped the vomiting. Afterwards she took small doses of blue pill, combined with rhubarb pill and light tonics, and recovered speedily.

In September, 1840, I was requested to see a female living in Ludgate-hill, who had for half an hour been vomiting blood. I found her completely blanched, pulse scarcely perceptible, and surface of body cold.

This patient was about 35, of a spare habit, and for some years had suffered severely from derangement of the gastro-hepatic system.

I gave her a grain of the acetate of lead, combined with one-eighth of a grain of opium; ordering her to drink, after each dose, infusion of roses, acidulated with acetic acid, and if the vomiting or nausea continued, to take the kreosote in half-drop doses.

After taking three doses of the acetate of lead and the acid mixture, the vomiting was suppressed; but as the irritability of the stomach continued for some time, the kreosote was administered for a little longer period, combined with light tonics and small doses of the mercurial and rhubarb pill; these were succeeded by the exhibition of carbonate of iron, which, with change of air, completed the patient's restoration to health.

On the 17th of last February, between four and five in the morning, I was called up to visit a female in my own immediate neighbourhood, who had been vomiting blood all night, and was still doing so, but not in any quantity, though she had lost a great deal, as I was shown two washhand-basins, one of which was filled with dark blood. The pulse was very weak and the surface cold. I gave half drops of kreosote every half hour, without any avail, blood being still vomited: I, therefore, substituted the acetate of lead, giving a grain every hour in the same manner as in the former case, which, after four doses, effectually stopped it.

This person was of a full habit, and appeared to have a great tendency to hæmorrhage, as the catamenia appeared, and I was informed that neither pregnancy nor suckling interrupted that discharge; she suffered also from great enlargement of the liver.

This patient had, on the preceding afternoon, undergone some operation for a non-united fracture of the forearm, which seemed to have caused the attack of hæmatemesis.

I have also administered the acetate of lead in the before-mentioned combination, which is Dr. A. T. Thomson's plan, in several cases of hæmoptysis arising from tuberculated lung, and also where it has occurred as a vicarious discharge, uniformly with success, and I have never witnessed any bad symptom produced by it.

MORE HINTS FOR MODERN DISCOVERERS.

DR. DUCROS, of Marseilles, cures deafness by cauterising the pharynx. When this affection depends on catarrhal congestion of the Eustachian tube, the doctor finds free cauterisation of the pharynx with nitrate of silver produce healthy action in the mucous membrane, and entirely remove the obstructions.

Dr. Deleau objects to the priority of Dr. Ducros. A long time since he recommended the same method of treatment in certain cases of deafness.

THE LANCET.

London, Saturday, May 8, 1841.

THE proceedings of the *Royal College of Physicians in London*, we are aware, possess very little interest in the eyes of the medical public. But at the present moment it may not be amiss to inform English physicians of a decision which expresses pretty clearly the light in which they are regarded by that venerable corporation. It was moved, we understood, at a recent meeting of this Secret Inquisition, by Dr. LATHAM, and seconded by Dr. WATSON—that all graduates of universities who had undergone an examination, should be admissible as members; and the motion was negatived, on a division, by a majority of *fifteen*,—*eleven* having voted for, and *twenty-six* against, the motion. It is a fact—curious and even interesting in a psychological point of view—that liberal measures are advocated by every person of talent in the College. Upon the present occasion, Dr. LATHAM, Dr. WATSON, Professor KIDD, Professor WILLIAMS, Dr. SEYMOUR, and others, who have all contributed more or less to the progress of medical science, and on this ground enjoy the respect of the profession, were in the minority; while the herd followed Dr. CHAMBERS, a spoiled child of Mammon, and the effeminate pet of worm-eaten duchesses, but quite unknown to the world of science, excepting by works stamped with features of a melancholy, deplorable, mediocrity. When it was proposed to incorporate the provincial physicians in the College, Dr. CHAMBERS actually raved; and ended with the emphatic declaration—that *he* would be no party to such "*dirty work*!" He would not soil himself by *association* with them. No; Dr. HASTINGS, the "aristocrats" of the College, with HALFORD and CHAMBERS, spurn you, and your country colleagues. Yet you wait on Providence; you expect; you open your mouth and shut your eyes.

RUSTICUS EXPECTAT dum defluat amnis; at ille
Labitur et labetur in omne volubilis ævum.

We quote the note—*in usum serenissimi Delphini*. "Similis est rustico illi, qui, cùm ad "amnem pervenisset, *stolidè expectabat*, dum "efflueret omnis aqua, ut *ad alterum ripam* "*transire posset*." The Worcester Council has determined not to stir a single step in behalf of the insulted members of the Provincial Association—the "unwashed" Doctors—until the Colleges have produced a Medical-Reform Bill. The countryman who waited until the river had flowed by, had a wiser head on his shoulders.

The proposition of Dr. LATHAM and Dr. WATSON was calculated to give practical effect to the petitions of the aggrieved Licentiates; yet all the petitioning Licentiates who have since been made Fellows by the grace of ——, we will not say of whom—but it was not their own—voted against the principle for which they had contended, with an ardour which might have deceived the very elect. They, nevertheless, entered the College to promote Reform. We never had much confidence in this policy. It was too refined. Men may desert their friends, and forswear their principles—or pick pockets, and get sent to prison—to carry out in pure philanthropy (outvying Mrs. FRY'S) the principles of reform, and to convert the wicked; but the thing has always an embarrassing appearance, and the end is too often no better than the beginning. If the renegade Licentiates had stood by their colours, and refused to coalesce with the monopolists, as several of the most high-minded men in the profession did, they would have had some share in the glory of obtaining justice for the great body of the medical profession; or, at all events, they would have escaped the infamy which ever enshrouds the history of cowardly and profligate desertion.

When Dr. MARSHALL HALL, for whom, as a reformer and a man of science, we entertain a high respect, said, that he would *accept* the Fellowship of the College, he stood upon the edge of a precipice.

We give the liberal-minded Fellows who proposed and supported the motion for

throwing open the gates of the College, credit for the best intentions; their services will not be forgotten; they considered it, no doubt, the first step, and the only one, that had a chance of being made: but the friends to a Radical Reform of the Profession, will hear of its rejection without regret. English Reformers can accept no measure which does not redress the grievances of English practitioners and English students; and the proposition, if we have collected its bearings, would have merely thrown open the College of Physicians to Scotch and Foreign Graduates practising in England; while the students of the English schools, who are equally well qualified, and have been compelled, by the Act of 1815, to take out the licence of the Apothecaries' Company, would have been treated as aliens and foreigners. We have protested a thousand times against the injustice of the College; and still maintain that a Scotch or an Irish student has an indefeasible right to all the privileges of English Colleges; but we can never consent to see the alumni of Aberdeen, St. Andrew's, or Edinburgh, who happen to have M.D. inscribed upon their parchments, ride roughshod over the general practitioners of England. Justice for them—justice for all.

In reference to the Self-Reforms of the English Corporations, of which so much has been spoken, we said two weeks ago—"the "probability is, that the few liberal members "in the Colleges will be *outvoted*, and that "the *Corporations* will remain faithful to the "selfishness and narrow-mindedness of their "nature." This has been the case in every instance.

The propositions which are now in circulation among the Fellows are, from all we have heard, little calculated to satisfy Reformers.

THE following Report affords much matter for reflection to Medical Reformers. The passages in italics are instructive: we give the chemists and druggists credit for sincerity and energy; but it is singular to see WILLIAM ALLEN, who has all his life opposed capital punishments, at the head of the list, encouraging the ignorant among his brethren to poison the public by prescribing.

REPORT OF THE COMMITTEE

APPOINTED AT

A PUBLIC MEETING OF CHEMISTS AND DRUGGISTS,

Held at the Crown and Anchor Tavern, Strand, on the 15th of February last.

Your committee, immediately upon their appointment, opened a communication with the chemists and druggists of every town in England, and of some towns in Ireland and Scotland, requesting the co-operation of the members of the trade, and soliciting subscriptions to enable them to offer the most powerful and effectual opposition to Mr. Hawes's Bill; and your committee had the satisfaction of receiving, not only promises of support, but liberal subscriptions from many places.

Agreeably with the instructions of the general meeting, your committee proceeded to the appointment of a deputation, for the purpose of conferring with Mr. Hawes, on the subject of postponing the second reading of his Bill; *to which request Mr. Hawes readily acceded*, and also undertook to erase from the said Bill every clause having special reference to the chemists and druggists.

Upon the introduction of Mr. Hawes's second Bill, your committee, acting under the advice of their counsel and solicitor, *determined to offer it their most powerful opposition*, as the provisions of the latter Bill had an injurious power over the interests of the chemists and druggists equal with that of the former.

Your committee, through their solicitor, thereupon required of *Mr. Hawes that he should insert a protective and explanatory clause, which should render the Bill totally inoperative upon the interests of chemists and druggists. To this Mr. Hawes has assented; and should the Bill pass a second reading, the said clause will be duly inserted.*

Your committee, however, are bound by Parliamentary usage to *offer an opposition to the second reading of the Bill*, and they have caused a petition to be presented to the House of Commons against the measure.

They have also sent a copy of the same to almost *every town in England, requiring the members of the trade, in the various localities, to forward a petition, on their own parts, against the Bill, and to instruct their representatives in the same opposition.* Your committee had the satisfaction of finding that, upon a second reading of the Bill being attempted, a large number of petitions were presented against it, and the House was "counted out." Your committee, though warranted in expressing an opinion that this Bill will not pass, are yet aware of the undiminished necessity of watching any further attempts to accomplish that object.

In the progress of their proceedings, your committee ascertained that the College of

Physicians, the College of Surgeons, and the Apothecaries' Company, had conjointly proposed obtaining some legislative enactment, by which the chemists and druggists were to be, for the future, placed under the government and control of these learned bodies, more especially of the Society of Apothecaries.

A deputation from your committee, therefore, sought and obtained an interview with the College of Physicians and the College of Surgeons, respectively, and received from the former an official notification that it was their intention to introduce into their proposed measures of medical reform, a provision by which the chemists and druggists should thenceforth be placed under some legislative control: and your committee have, therefore, again assembled you for the purpose of receiving new instructions and enlarged powers to meet present and future circumstances.

Your committee having considered the subject, are of opinion *that the chemists and druggists are capable of self-government*; they, therefore, recommend that the chemists and druggists of the empire should immediately form themselves into a permanent association, to be denominated the "Pharmaceutical Society of Great Britain," having for its object the union of the members of the trade into one body—the protection of the general interest—and the improvement and advancement of scientific knowledge. As the basis of such union, your committee would recommend the adoption of education, examination, registration, and representation, as involving beneficial results to the public in general, and to the chemists and druggists in particular; and offering to the existing medical corporations, and to the medical profession at large, a guarantee, that whilst the chemists and druggists are anxious to retain their present privileges, they are disposed to afford every public evidence of their fitness to exercise them.

JOSEPH GIFFORD, Chairman.

To the great regret of the friends of the *University of London*, Dr. TWEEDIE was appointed an Examiner at the late election, in the place of Dr. WATSON. This has led to the resignation of Dr. FERGUSON, who has expressed his sense of the conduct of the Senate in the following spirited letter to the President. We shall probably have to discuss the conduct of the Senate at some length on a future occasion:—

"9, Queen-street, May Fair,
16th April, 1841.

"MY LORD,—As president of the senate of the University of London, permit me to tender to your lordship my resignation of the office of examiner in midwifery, to which I had the honour of being appointed on the 8th instant.

"The fact made apparent at the late election, that a faithful and efficient discharge of the duties of an office may, nevertheless, be followed by dismissal, has compelled me to withdraw myself from a position which, though honourable in itself, may entail on me also the implied censure of a rejection.

"I need not assure your lordship, that could I have foreseen the results to which I have alluded, I should have at once declined the offer of those friends who did me the honour of requesting me to serve as an examiner. And I have only now delayed tendering my resignation a few days, that I might avoid the imputation of a hasty decision in so important a matter, or the slightest appearance of disrespect towards that body of gentlemen over whom your lordship presides. I am, my lord, your lordship's obedient servant,

"ROBERT FERGUSON, M.D."

The Chinese as they are: their Moral, Social, and Literary Character: a New Analysis of the Language, with succinct Views of their Principal Arts and Sciences. By G. TRADESCANT LAY, Naturalist in Beechey's Expedition, late Resident at Canton, &c. Ball and Co.

AT the present moment when so much of popular attention, particularly among educated and intellectual minds, is directed towards China and the Chinese, Mr. Lay's excellent and interesting volume will be a most acceptable and well-timed contribution. It is at once pleasing and gratifying to see a work, such as this, replete with abundant and varied information, emanating from the pen of one so well calculated to observe and record his experience, and, moreover, from a member of our own profession. It is one proof among many, how admirably fitted by education the medical man is, to appreciate the real condition of those with whom he associates and moves—to weigh accurately the circumstances which influence their manners and habits, and to sympathise humanely in their feelings and interests. The present work is written in a most benevolent and christian-like spirit; and while it instructs, will not fail to convey a lesson of peace and of moral gratification to the minds of its readers. In a notice of the volume, destined for the perusal of medical readers, we must necessarily pass over many subjects of high political and moral interest, and confine our selections to such observa-

tions as bear more directly upon professional science. In speaking of the effects of opium-eating, Mr. Lay remarks,—

"This great metropolis has a choice of wretched and degrading sights, but nothing that I ever see reminds me of an opium-smoker. His lank and shrivelled limbs, tottering gait, sallow visage, feeble voice, and the death-boding glance of his eye, are so superlative in their degree, and so closely blended in their union, that they at once bespeak him to be the most forlorn creature that treads upon the ground. Such sights, however, are not very common, for the miserable beings generally hide themselves from public view, so that, amidst many thousands of healthy and happy faces, we only see here and there one of these prodigies of evil habit."

Among the chapters, especially calculated to interest the medical practitioner, are those on "Surgery among the Chinese;" "Medical Knowledge in China;" "Curious Conceptions of the Human Frame;" "The Veterinary Art, &c.:" from these we will make a few extracts for the amusement of our readers. As a specimen of Chinese semeiology, says Mr. Lay, I might take the following:—

"1. If the eye be of a red colour, the disease is in the heart; 2. white, in the lungs; 3. green, in the gall; 4. yellow, in the spleen; 5. black, in the kidneys; 6. a yellow colour which cannot be described or named, in the middle of the chest."

The following is the description of the operation for cataract by a Chinese poet:—

"The interior light of the eye checks the candle of Heaven, just as a lighted taper in the day hinders vision, and the pearl within the eye contracts a misty haze.—The operator was careful not to wound any of the blood-vessels, lest the aerial principle which circulates in the blood should escape."

Of the therapeutic treatment adopted by the Chinese in some of their diseases, the author observes,—

"The small-pox, or rather a disease resembling the small-pox, has excited much attention in China from its fatal effects; it attacks children, and seems to be confined to them, and this makes me think that it is not the same in all respects as that which creates such frightful havoc among ourselves. The native writers of former ages direct that the room should be kept clean, and the door, if it be open to the wind, should be pasted up, for light comes in at the door in China. Frankincense is to be used in fumigations. To open the eyes, when closed by this disease, the blood of an eel is dropped into them. The juice extracted from the root of the *musa coccinea*, a beautiful species of plantain tree, is used for the same purpose. If the patient see spectres, a man's tooth is wrapped up in paper and burnt to ashes, which are pounded and mixed with wine for a potion. Fumigations prepared by putting sulphur, seeds of the carambola, southernwood, &c., into a tub used for feeding horses, and heating the contents, were in great repute for the cure of many disorders; and as the quantity seems to have been large enough to envelope the sick person in a cloud of fumes, this device of the therapeutic art deserves some of the credit that is given to it. I found this method of allaying disease in favour among the people of Borneo, who begged my botanical paper for the purpose of lighting or heating the herbs that were to be placed on it. The pitch plaster is one of the most common appliances in China; and for rheumatic pains, to which the people are much subject, may not be amiss. Powders of different kinds are often spread upon this plaster, by which we are to understand that the pitch performs only a subsidiary part in working the desired effect. The common venders of herbs prepare a poultice by pounding a certain number of fresh ingredients in a stone mortar; this they use for boils, uneasy swellings, &c."

In contemplating the rude practice of medicine among primitive nations, there is much for the observant mind to turn to useful account. We see, as it were, the roots from which our own more perfect processes have grown, and we are led to reflect upon the intention which guided our forefathers in their selection of remedies.

The chapter on the Chinese Language is well deserving the attention of the reader, particularly to the man who has a taste for philological researches; he will find principles stated in it, and a mode of dealing with the language suggested, which will serve to unravel the apparent absurdities adhering to that or any other tongue. In the chapters on Music and Philosophy some curious matters are given, which will scarcely fail to call up a train of ideas and reflections in those who delight to trace the records of science as it existed in its primeval simplicity. In taking our leave of the "Chinese as they are," we must cordially recommend its perusal to our readers; and we feel convinced that they will agree with us that our praise has not been wrongly bestowed.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, April 29, 1841.

Dr. ROBERT WILLIAMS, President.

Observations on the Anatomy of the Lungs. By THOMAS ADDISON, M.D., Physician to Guy's Hospital.

THE author begins by expressing an opinion that notwithstanding the attention which has been devoted of late to morbid anatomy, it is by no means apparent that those researches have been made sufficiently available to explain the function and structure of obscure, intricate, and complicated parts of the body in a state of health. Proceeding on this principle of rendering healthy and morbid anatomy materially subservient to the elucidation of each other, the author hopes that he has succeeded in illustrating, if not in demonstrating, certain points of great interest with reference to the lungs, some of which have been already pretty generally admitted, whilst others are, perhaps, altogether novel. The results of his investigations seem to prove, almost beyond dispute, that the aerial cellular tissue of the lungs is made up of well-defined rounded or oval lobules, united to each other by interlobular cellular membrane, each lobule constituting a sort of distinct lung in miniature, having its own separate artery and vein; that these lobules do not communicate directly with each other; that they do not, as Reissessen has supposed, consist of the globular extremities of as many bronchial tubes, but, on the contrary, as Dr. Hodgkin has suggested, are made up of a collection of cells, in which, by a common opening, a minute filiform bronchial tube abruptly terminates; that the pulmonary artery accompanies the bronchi, branch for branch, to the minutest divisions of the latter; that pneumonia consists, essentially, of inflammation of the aerial tubes; that pneumonia and inflammatory tubercle are identical; that acute pneumonia, in healthy constitutions, scarcely ever leads to the formation of an abscess unless deposit previously existed, but that when it occurs in cachectic or broken-down constitutions, or supervenes in the progress of organic diseases, it causes one or more distinct lobules to soften down into an ill-conditioned abscess; that ordinary tubercles present the same varieties in the lungs that they do in serous membranes; that emphysema of the lungs consists chiefly of mere dilatation of the cells, but in part, also, of more or less extensive laceration of them; and, lastly, that the circumscribed gangrene of Laennec is commonly, if not uniformly, a mere effect or advanced stage of pulmonary apoplexy.

The author's object, however, in the present communication, is not to solicit attention to any of these matters, but merely to point out a mode of distribution of the pulmonary veins, which has not, as far as he knows, been noticed by any preceding anatomist. After having cited passages from the works of Cloquet, Meckel, Adelon, Otterier, and Bichat, touching the situation and course of the minute pulmonary veins, the author proceeds to show the mode of their distribution, which his own dissections appear to him to demonstrate. It would exceed the limits of an abstract to give the author's description at length; suffice it to say, that the lung is made up essentially of a vast expanse of membrane, the interior of which is unceasingly exposed to the influence of atmospheric air, and upon the surface, or in the substance of which are spread out the capillary ramifications of the pulmonary artery; these arterial capillaries passing from thence to the exterior of the membrane to form the pulmonary vein, which, throughout its whole course, is found to be situated in the exterior of the aerial cellular structure of the organs.

The author indulges a hope, that with a knowledge of this striking distribution of the pulmonary vein, we shall in future be more successful in our investigations into the pathology of phthisis; and, especially, that it will set at rest the long-agitated questions respecting the origin and seat of pulmonary apoplexy.

The discussion which followed this paper consisted chiefly of explanations of the real meaning of the author, and the expression of doubts, as to whether anything more than the larger branches of the pulmonary vein had been detected. Mr. Bowman had detected these by the microscope some time since.

VACCINATION OF PAUPERS AT BLACKBURN.

To the Editor of THE LANCET.

SIR:—The board of guardians for the Blackburn union, having by public advertisement signified their desire that medical men should come forward with tenders to vaccinate according to the provisions made by the Act for the extension of the practice of vaccination, a meeting of several of the medical men of this town was held, when the subjoined tender and declaration were agreed upon and put in course of signature:—

"*Tender.*—We, the undersigned medical practitioners of Blackburn, do hereby tender our services as vaccinators under the Act recently passed for the extension of the practice of varcination, at the rate of 2*s.* 6*d.* for each successful case."

"*Declaration.*—We, the undersigned medical practitioners of Blackburn, do seve-

rally engage not to offer for, nor accept of, the office of vaccinators for the poor in this union, under the provisions of the Act recently passed for the extension of vaccination, for a less sum than 2s. 6d. for each successful case; believing, as we do, that a lower scale of remuneration would not compensate us for our trouble."

In anticipation of, probably, several declining to join with the majority of their brethren in making this stand to uphold the respectability of the profession, and resist any inroads upon our private practices by sixpenny vaccinators—a curtailment of our merited rewards—a counter-tender was prepared, to the following effect:—

"We, the undersigned, &c., do hereby tender our services to vaccinate gratuitously all who may apply to us for that purpose, and to make all the required returns to the board of guardians, on being provided with the necessary blank forms, but must decline accepting a smaller fee than 2s. 6d. per case."

It is most gratifying to be enabled to state, that out of fifteen resident medical practitioners in this town, the foregoing terms were most cordially and unanimously subscribed to by fourteen: thus all concurring, with one solitary exception, and that individual being perfectly aware that the unanimity of the feeling on the subject was against him, was expected ultimately to concur with us, or at least not having declared his intention of tendering for a smaller sum, not to take a sinister advantage of our openly declared and straightforward conduct; and, consequently, the offer to vaccinate at the rate of 2s. 6d. per case, accompanied by the declaration that a less sum would be unremunerating was handed in to the board. Finding, however, that this individual had offered to vaccinate for the paltry consideration of 1s., the offer to vaccinate gratuitously was forwarded to the guardians; who, however, having already decided on accepting Mr. Wilding's pitiful offer, did not deem themselves at liberty to entertain the latter proposal.

Our conjoined opinions being disregarded, and our endeavours frustrated, by the professional turpitude of one individual, a meeting was immediately held, at which it was resolved to adhere to the spirit which dictated our offer to the guardians to vaccinate gratuitously in pauper cases, and to make the public aware of this determination. Resolutions condemnatory of Mr. Wilding's unprofessional conduct in this affair were unanimously passed; and it was proposed that a brief statement of the facts should be sent to THE LANCET, requesting their insertion. I have the honour to be, your obedient servant,

A MEDICAL PRACTITIONER.

Blackburn.

"VACCINATION.

"The following medical men of Blackburn, considering the appointment of only one vaccinator to the district of Blackburn to be altogether insufficient for carrying the provision of an Act recently passed for the 'Extension of Vaccination,' into any thing like full or efficient operation; and, from circumstances which have lately taken place, have unanimously agreed to vaccinate, in pauper cases, gratuitously; and invite all who may desire to take advantage of this offer for protection against small-pox, to apply personally at any of their respective surgeries."

(Signed by 2 Physicians and 12 Surgeons.)

Blackburn, March, 1841.

PUERPERAL CONVULSIONS.

To the Editor of THE LANCET.

SIR:—I have just read the report of a case of puerperal convulsions in THE LANCET of the 27th ult., by Mr. Scott. I beg to transmit to you the following, which occurred to me about a year ago, in which a similar treatment was pursued, the only difference being, that the convulsions in the one case were subsequent, and in the other previous, to delivery; although the former, under some circumstances, would require a very different course to be followed. I am, sir, your humble servant,

J. L. CLARK, M.R.C.S.

Tamworth, April 3, 1841.

CASE.

I was consulted on Saturday, March 28, 1840, by Sarah Barratt, æt. 18, residing at Fazeley, for a very considerable œdematous swelling of the right lower extremity. She stated that she was six months advanced in pregnancy, and that she had continued her work (that of a cotton-spinner) up to a few days previously. The abdomen was immensely distended, and milk had flowed from the mammæ for several days, which circumstances inclined me to suspect that the process of utero-gestation was more matured.

On the following Monday, at four, A.M., I was called to her, but unfortunately was not at home, and did not return until nine o'clock; in a few minutes from this time I was by her bed-side. The attendants informed me, that she had been in fits, with slight intermissions, from three o'clock until six, which they described as being very strong and convulsive, requiring several persons to hold her and prevent her from doing injury to herself; they also stated that a large quantity of bloody mucus had flowed from the mouth, accompanied with a "rattling" in the throat, and that the fæces and urine had passed involuntarily.

When I saw her she was extremely restless, tossing from one side of the bed to the other, and perfectly insensible; the pulse was beating at a most rapid rate. I bled her to sixteen ounces, which had the effect of reducing the pulse and producing slight syncope. She then became more tranquil. I ordered an antispasmodic mixture of assafœtida, &c., cold applications to the head, and an injection of turpentine to be thrown into the rectum. Everything taken by the mouth was rejected instantly; the enema acted well. I was called to her at three, P.M.; the convulsions had returned at two, and she was in one at the time I saw her. The face was swollen and livid; muscular power was wonderfully strong; a frothy mucus issued violently from the mouth; the pulse was not to be counted. I opened a vein in the arm, and took thirty ounces of blood; when this quantity had been drawn, the pulse became less rapid, and the convulsions less violent, until they left her entirely; but the patient was perfectly insensible, and remained very restless; and at six o'clock, fearing a return of convulsions, I requested my friend, Mr. Thompson, of this town, to see her with me. He very promptly attended, and suggested the propriety of ascertaining the state of the os uteri.—(I should mention that I had made an examination previously in the morning, and found the uterus perfectly closed.)—I now found it dilated to the size of a half-crown. In making the examination the membranes gave way, and a most profuse discharge of the liquor amnii escaped, deluging the bed and floor. The labour proceeded favourably from this time, and at nine o'clock she was delivered of twins, "of six months." She passed a tolerable night, and on the following morning signs of sensibility showed themselves. She rapidly recovered; she stated that she knew nothing of what had passed, and was perfectly unconscious of having given birth to her children. The œdema of the leg quickly subsided; there remained a general intumescence of the whole body, and a leaden hue of the countenance for a week or ten days after delivery; a peculiar spasmodic cough, and a most copious secretion of urine. These symptoms gradually left her, and she became as well as a woman after an ordinary case of labour.

I apprehend that the loss of blood in this case relieved the extreme pressure on the system, which was more effectually done by the evacuation of the liquor amnii. This girl has been since married, and is again pregnant.

MISCHIEF OF PURGATIVES SOON AFTER DELIVERY.

To the Editor of THE LANCET.

SIR:—Mr. Peter Scott's case of puerperal convulsions in last week's LANCET is so very imperfectly related, that I am sure no one can form an opinion either as to the nature of the attack, or the propriety of the treatment adopted. We are not informed of a single symptom either preceding or accompanying the attack, and therefore have nothing to justify an opinion. All Mr. S. states bearing on the point is, that at ten, P.M. (fifteen hours after delivery) "on being hastily sent for, he found her in very strong *epileptic fits*, violently convulsed, and in a high fever." No mention being made to the contrary, we are led to conclude that she was not subject to epileptic attacks. Previous to the above, Mr. S. states that he saw her five hours after delivery, and "was told that she had been sitting up in bed nursing her baby." He had no reason, it would appear, to believe that she was then at all unconscious, but that she had taken this freedom with herself simply from the fact of feeling well and comfortable. Mr. S. then administered an aperient draught, *five* hours after delivery. In this most practitioners will acknowledge that he was in error, although it may not have had any injurious effect in his case. I have myself known so much mischief to follow the too early administration of purgatives after delivery, that I think the practice cannot be too much reprobated. The disposition to inflammation of the peritonæum at that time is so very great, that I knew a gentleman some years since who had several most alarming cases in his practice, caused, there was every reason to believe, by too early purgation. That, in fact, is now his own opinion; and such is his horror of anything of the like occurring again, that he almost carries his treatment to an extreme the other way.

Perhaps Mr. S. will give us the symptoms in his case both *before* and after the bleeding, its immediate effect, &c.; also, the previous habits of the patient, and whether the uterine action had been excessive, &c. I remain, sir, your very obedient servant,

O. P.

Nottingham, March 30, 1841.

DIVISION OF THE RECTI MUSCLES IN MYOPIA.

M. GUERIN is warmly contesting his right to the discovery of the cure of myopia by division of the four recti muscles, in the Academy of Medicine, in Paris, against MM. Phillips and Carron de Villards. We observe that his plumes have been already borrowed by *modern discoverers!* on this side

of the water. His first paper on the subject was written in December, 1840. This project will afford new grounds for victimising the credulous and ignorant among our own population. It is much to be regretted that Lord Ellenborough's Act is not permitted to extend its protective influence amongst the ambitious young *knivists* and *scisserists* of the present cutting and maiming era.

M. Guerin states that myopia is, in the greater number of instances, the result of congenital shortening of the recti muscles of the eyeball. The surgical treatment of this infirmity consists in the section of these muscles. "I have performed this operation with great success. To-day, the tenth after the operation, the field of sight is much lengthened, while the globe of the eye has very remarkably altered in its form."

M. Carron accuses M. Guerin of borrowing the idea from Sir E. Home and Ramsden. It is truly amusing to see two educated men quarrelling about so frivolous a matter. Will any man in his senses run the risk of deformity for life, after a painful operation—perhaps in addition an injured sight—when the simple inconvenience under which he labours may be perfectly remedied by the use of a pair of spectacles. Pooh! pooh! the whole affair is too absurd.

M. Phillips effects a perfect cure of myopia by dividing the tendon of the superior oblique muscle. While M. Bonnet, of Lyons, succeeds equally well by cutting across the inferior oblique near to its origin.

NEW OPERATION FOR STAMMERING.

(*From a Correspondent.*)

An unfortunate lad has lately been most cruelly victimised by one of the stammering operators. It is needless to add that he stammers worse than ever. The most ingenious operation that has yet been proposed for relieving this infirmity, but which is likely to be claimed by numerous candidates for operative distinction, is the following:—It consists in the removal of the extremity of the coccyx by means of half-a-dozen elegant little instruments invented for the express purpose, and the insertion of a needle with a large eye at the extremity into the cancellated structure of the bone. The needle is so constructed as to admit of being attached to the conducting wire of a pocket galvanic battery, of about the size and similar in form to an ordinary hunting-watch. When the patient wishes to speak he attaches the wire to the end of the needle, and immediately the galvanic current being transmitted by the vertebral column, issues through the fauces, and keeps the velum palati distended like a sail, and the uvula floating upon its stream like a pennant, while the voice is perfectly regulated. The eminent members of the profession who were present at the first operation performed on this principle, were completely electrified at its wonderful success. It is proposed to petition Parliament for a patent for this truly philanthropic discovery.

BOOKS RECEIVED.

Hints for Invalids about to visit Naples; being a Sketch of the Medical Topography of that City: also an account of the Mineral Waters of the Bay of Naples; with Analyses of the most important of them, derived from Authentic Sources. With Engravings. By J. C. Cox, M.D., F.L.S. Longman and Co. 1841. 8vo. pp. 190.

TO CORRESPONDENTS.

A Constant Reader will second any motion which may be made after one of the "lectures on medical physics" at Guy's Hospital, that the practice of sitting thereat with hats on be forthwith abolished, both in token of the good breeding of the students generally, and the convenience of listeners on the back seats.

Some of the views of *Humanitas* are sound and correct; others it would be useless to promulgate, and we feel that it is useless to address advice or remonstrance to one who is, in reality, totally ignorant of the whole question with which he has ventured to meddle.

Moderator.—The Editor could not find time to devote to the labour.

Medicinæ Studiosus Nobilis.—The "correction" is not worth making the subject of a letter. Every one who reads the sentence will know well enough what the writer means, just as we ourselves know perfectly well that when *M. S. N.* wrote "conformably *to*," he meant "conformably *with*."

Communications have been received from *Mr. Wells; Mr. Morton; Mr. Judd; Mr. Dixon; Mr. Worthington; An Inquirer; Mr. Foster.*

Mediculus. We are not aware of any such lectures being delivered in London.

If *A True Lancetian* will favour us with his name and address, we will endeavour to supply him with the information which he desires.

The communication of *M. H. G.* has not been published, from our wish to terminate a controversy which is not likely to benefit our readers.

An Eleven Years' Subscriber should claim his professional exemption, and refuse to serve.

Dr. Mantell's biographical notice of the late Mr. Hodson, and *Mr. Stamer Stanley's* paper, have been received for publication.

Dr. Hocken.—We have omitted Dr. Hocken's remarks on the physiology of strabismus, as they have already appeared in print.